

Fire and Rescue Shared Services Feasibility Study

Winter/Spring 2016



Emergency Services Consulting International
Providing Expertise and Guidance that Enhances Community Safety

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Executive Summary

In order for the ESCI project team to gain a basic understanding of the participating agencies, it was first necessary to review each organization regarding the services they provide, the area that they cover, and resources they have at their disposal. These departments include:

- Albert Lea Fire-Rescue
- Albert Lea Township Fire Department
- Alden Volunteer Fire Department
- Clark's Grove Volunteer Fire Department
- Conger Community Fire Department
- Emmons Volunteer Fire Department
- Freeborn Volunteer Fire Department
- Geneva Fire Department
- Glenville Fire Department
- Hartland Fire Department
- Hayward Volunteer Fire Department
- Hollandale Community Fire Department
- London Community Fire Department
- Manchester Volunteer Fire Department
- Myrtle Community Fire Protection Association
- Twin Lakes Volunteer Fire Department

The beginning portions of the report provide the reader with a brief overview of each participating agency and includes a review of foundational policy documents and budget and funding. Each department has varying levels of standard operating guidelines and administrative procedures documents but only a few have documents contain important civil liability policies such as sexual harassment, workplace violence, and drug/alcohol use and abuse. A number of recommended policies are provided within the body of the report. In addition, some departments did not provide sufficient financial information to provide a robust analysis of funding and departmental budgets.

The next report section provides a review of capital assets of each organization including stations and apparatus. Each of the study agencies provides services from a single facility; each evaluated from a non-architectural/engineering perspective. The most notable negative aspect of each station was that none had auxiliary power. Should weather or other circumstances cause an interruption of power, response could be compromised without the availability of generator power. Additionally, adequate training areas are limited.

In regards to apparatus, the region uses a fleet of 26 engines/pumpers, 16 tanker/tenders, 14 brush/grass units, two aerial ladders, and several other rescue/first response vehicles. ALFR is the only study department that currently maintains a fully funded capital replacement plan for apparatus. Others either have no plan in place or only maintain a limited funding mechanism for apparatus replacement.

ESCI evaluated each agency's personnel from two perspectives: administrative/support and operational. ALFR is the only department that has dedicated administrative and support personnel but, for this analysis, ESCI included the chiefs, deputy chiefs, and assistant chiefs in this category for each of the other agencies. Within the study region, these positions total of 35 personnel. Operationally, ESCI counted all positions at the level of captain or below. These personnel total 304. The national average of personnel per 1,000 population in areas of similar size is 20.0 and the regional median (Midwestern US) is 18.5. The totals for Freeborn County equate to 11.0, below the national and regional values.

The next report section evaluates service delivery from several perspectives, including: Demand, Distribution, Concentration, Reliability, and Response Performance. Service demand was reviewed based on overall demand as well as temporal changes over each month, week, and hour of the day. Like most organizations, when viewed by hour of day, service demand begins to increase between 5:00 a.m. and 6:00 a.m., peaking during the mid-day hours, and then declines into the night.

Based on distribution analysis, a vast majority of the population of Freeborn County can be reached within 10 minutes of travel. ESCI also evaluated travel distances based on ISO recommendations. To receive the highest ISO credit, a property should be within 1.5 miles of a fire engine, 2.5 miles of an aerial apparatus, and five miles from a fire station. Those properties outside five road miles from a fire station are considered 'unprotected' and may have substantially higher fire insurance premiums. For Freeborn County, only ALFR has an aerial device and most of the population lives within a reasonable distance from a fire station within the center of each response area. There are, however, a number of properties located outside of the five mile distance.

Resource concentration is an analysis that determines how quickly a department can assemble the appropriate number of apparatus and/or personnel on the scene of a major incident. In many cases, this is conducted considering a single family detached dwelling that is considered moderate risk in which at least two engines and one aerial apparatus would be needed to effectively mitigate the incident. Based on this analysis, a large portion of Freeborn County can receive an effective response force of three engines within 10 minutes of travel, if dispatched simultaneously.

For response performance analysis, ESCI was most interested in the ability to respond with the appropriate resources to the highest percentage of incidents. For this reason, ESCI analyzed National Fire Incident Reporting System (NFIRS) and computer aided dispatch (CAD) data and generated average, 80th, and 90th (for ALFR) percentile response performance for emergency incidents only. Each department, except one, is within the nationally accepted response performance objectives of 14:00. HVFD is at 14:36, slightly outside the national benchmark. ALFR is measured at the 90th percentile since they use career personnel and is slightly above the national benchmark of 5:20 at 7:00.

The final section of the evaluation portion of the report reviews the support programs of training and fire prevention/education efforts. Training, the single most critical part of how personnel are prepared to handle emergency incidents, varies widely across the study departments. This area, which was reviewed in-depth, contains a number of areas that could be used as cooperative efforts. Only ALFR has a formal

life safety education program. The other departments, although they each provide some level of public education, do not have formal programs.

The final report section uses the information contained within the overall evaluation of the study departments to determine what cooperative efforts strategies may be feasible within Freeborn County. This analysis begins with a list of functional cooperative efforts that will allow the study departments to maintain their independence and identity while working with adjacent agencies to operate more efficiently. The functional cooperative efforts are described within the body of the report but can be summarized as follows:

- Development of an Automatic Aid Systems
- Regionalized Incident Command
- Shared Health and Safety Programs
- Regional Capital Replacement Planning
- Shared Recruitment and Retention Efforts
- Regionalized Training Opportunities
- Unified Standard Operating Guidelines

Beyond functional cooperative efforts, and considering that this project includes all departments serving Freeborn County, there are potential operational strategies that could be implemented to improve the overall delivery of service throughout the County. The following is a list of potential feasible options beginning with a 'do nothing' approach and ending with full consolidation of the study departments.

Status Quo

Since the current delivery of services has not been a problem in the past, ESCI would be remiss in not stating that the status quo is feasible option. This option, however, will not address the issues that all departments are facing in regards to staffing and availability of resources. If no further operational cooperative efforts are pursued, it will be necessary for the study departments to work through the functional strategies to ensure that staffing, capital replacement, and future funding are following a sustainable model.

Quadrant Approach

The geography of Freeborn County, as well as the major highways that traverse the County effectively divide the County into four relatively equal quadrants: Northeast, Northwest, Southeast, and Southwest. In addition, the City of Albert Lea, if merged with Albert Lea Township FD, would serve as the hub department for this strategy.

County Fire Department

Considering that the study departments serve a majority of Freeborn County, it is feasible that all the existing departments could be merged into a single countywide organization.

County-Operated Fire Department

Under this strategy, Freeborn County would be the governing authority over the organization. Since, during the process of this study ESCI did not directly interact with County staff at the administrative level, this strategy would need substantial support from County leaders, particularly those in elected positions. Operationally, this option would build on the quadrant approach and provide for regional supervisory staff tied to a centralized command structure.

Intergovernmental Agreements

The use of intergovernmental agreements has been used frequently to allow various governmental entities to cooperate more closely with adjacent units of government. In this case, the strategy would allow the various departments and their supporting municipalities to determine how far to extend their agreements. For instance, ALFR could enter into an agreement with ALTFD and the other agencies directly adjacent to the City and the Township.

Joint Powers Authority

A Joint Powers Authority (JPA) functions much like a school district in that it is considered a separate unit of local government but is represented by members of the creating organizations. Alternatively, governing members could be elected from the community at-large to provide more of a community centered vision. One of the largest JPAs that ESCI has worked with is Orange County Fire Authority (OCFA) in southern California.

Countywide Fire District

The final strategy is to go one step further from a JPA and create an independent fire district with taxing authority. Although the use of this governance model is limited in Minnesota, the Cloquet Area Fire District (CAFD) was successful at securing legislation that does allow it. An independent fire district would be a separate unit of government and would have independent authority to levy a tax to support operations. This authority would not be limited to county or municipal control. In addition, how the governmental structure is constructed would be left to the documents that create the fire district.

The final portion of the cooperative efforts section reviews the fiscal impacts of each strategy. In essence, the current model is not sustainable and future funding will be necessary to ensure the continued delivery of quality service. Based on the valuation of the county and the recent allocations for each department, a levy rate of \$0.0483 per \$100 valuation would be necessary to fully support regional fire services. How this tax would be levied will be determined by the governance structure chosen by regional policymakers.

The final report section provides policymakers and department personnel with a general process of evaluating recommendations and moving forward with implementation of those elements chosen. As identified previously, each of the study departments are experiencing certain difficulties in maintaining adequate staffing (particularly during the day), replacement capital equipment, and ensuring adequate and consistent training across the region. This report details a number of feasible options to address these

issues and goes further to provide options for enhanced cooperative efforts throughout Freeborn County. In which direction the departments chose to move will ultimately be left to local policymakers. A decision to move forward is not a decision to consolidate but to explore the feasible options presented in this document.

Section I – Baseline Agency Evaluations

The collective fire departments serving all of Freeborn County, Minnesota engaged Emergency Services Consulting International (ESCI) to conduct an analysis on the potential for shared services among the departments. This document serves as the report of that analysis and begins with a basic overview of each study participant agency.

ORGANIZATIONAL OVERVIEW

In order for the ESCI project team to gain a basic understanding of the participating agencies, it was first necessary to review each organization regarding the services they provide, the area that they cover, and resources they have at their disposal. The following paragraphs provide a basic description of each department and the communities they serve.

Alden Volunteer Fire Department (AFD)

Founded in 1888, AFD is an all-volunteer fire department within the governmental structure of the City of Alden. The department is staffed with 24 volunteer personnel including one Fire Chief, two Assistant Chiefs, two Captains, and 19 other responders.

Services are provided from a single facility located centrally within the City with a fleet of five apparatus including one engine, one tanker/tender, one light rescue, one grass unit, and one ancillary vehicle. The department serves an area of 54 square miles with an estimated population of 1,250 in the City of Alden and the Townships of Alden, Carlston, Manchester, and Pickeral Lake. The resulting population density is estimated at 23.1 persons per square mile. The community is a mix of suburban and rural residential with a large portion of the response area agricultural properties

Albert Lea Fire-Rescue (ALFR)

Founded in 1879, ALFR is a career fire department within the governmental structure of the City of Albert Lea. The department is staffed with 16 career personnel including one Deputy Fire Chief (serving under the Director of Public Safety), three Captains, three Lieutenants, and nine firefighters. In addition, paid-on-call (POC) personnel supplement the career firefighters.

Services are provided from a single facility (fire station) located centrally within the City with a fleet of six apparatus including two engines, one aerial ladder, two utility vehicles and one command vehicle. The department serves a population of 17,815 in an area of 14.4 square miles resulting in a population density of 1,239 persons per square mile. The community consists of a mix of commercial, industrial, and residential occupancies and currently enjoys an ISO Class 3 rating according to the Public Protection Classification (PPC) system.

Albert Lea Township Fire Department (ALTFD)

Founded in 1948, ALTFD is an all-volunteer fire department within the governmental structure of Albert Lea Township. The department is staffed with 15 volunteer personnel including one Fire Chief, two Captains, and 12 other responders.

Services are provided from a single facility located within the City of Albert Lea with a fleet of three apparatus including one engine, one tanker, and one rescue/grass unit. The department serves an area of 26.2 square miles with a population of 808 resulting in a population density of 30.8 persons per square mile. The community consists of a mix of urban, suburban, and rural residential, as well as light commercial and agricultural properties

Clark's Grove Volunteer Fire Department (CGFD)

Founded in 1948, CGFD is an all-volunteer fire department within the governmental structure of the City of Clark's Grove. The department is staffed with 20 volunteer personnel including one Fire Chief, one Assistant Chief, two Captains, and 16 other responders.

Services are provided from a single facility located centrally within the City with a fleet of four apparatus including one engine, one tanker/tender, one rescue/medical unit, and one grass unit. The department serves an area of 54 square miles with an estimated population of 1,500 in the City of Clark's Grove and the Townships of Bancroft, Bath, and Riceland. The resulting population density is 28.3 persons per square mile. The community is a mix of light commercial, rural residential, and agricultural properties

Conger Community Fire Department (CCFD)

Founded in 1954, CCFD is an all-volunteer fire department within the governmental structure of the City of Conger. The department is staffed with 28 volunteer personnel including one Fire Chief, one Assistant Chief, two Captains, and 23 other responders.

Services are provided from a single facility located centrally within the City with a fleet of four apparatus including two engines, one tanker, and one grass/rescue unit. The department serves an area of approximately 48.9 square miles with an estimated population of 2,500 in the City of Conger and the Townships of Mansfield, Alden, Pickerel Lake, and Nunda. The resulting population density is approximately 51.2 persons per square mile. The community is a mix of rural residential and agricultural properties

Emmons Volunteer Fire Department (EVFD)

Founded c. 1930, EVFD is an all-volunteer fire department within the governmental structure of the City of Emmons. The department is staffed with 20 volunteer personnel including one Fire Chief, two Assistant Chiefs, four Captains, and 13 other responders.

Services are provided from a single facility located centrally within the City with a fleet of five apparatus including two engines, two tanker/tenders, and one grass unit. The department serves an area of 76 square miles with an estimated population of 2,500 in the City of Emmons and the Townships of Freeman, Nunda, and Mansfield in Minnesota and the Townships Norway and Silverlake in Iowa. The resulting population density is approximately 32.9 persons per square mile. The community is a mix of rural residential and agricultural properties

Freeborn Volunteer Fire Department (FFD)

Founded c. 1930, FFD is an all-volunteer fire department that is governed by a joint powers board that is operated jointly by the City of Freeborn and Freeborn Township. The department is staffed with 14 volunteers including one Fire Chief, one Assistant Chief, two Captains, and 10 other responders.

Services are provided from a single facility located centrally within the City with a fleet of four primary apparatus including two engines and two tanker/tenders. The department also maintains two transport ambulances. The department serves an area of 54 square miles with an estimated population of 1,000 in the City of Freeborn and the Townships of Freeborn, Carlston, and Manchester resulting in a population density of 18.5 persons per square mile. The community is a mix of light commercial, rural residential, and agricultural properties.

Geneva Fire Department (GFD)

Founded c.1919, GFD is an all-volunteer fire department within the governmental structure of the City of Geneva. The department is staffed with 26 volunteers including one Fire Chief, one Assistant Chief, two Captains and 22 other responders.

Services are provided from a single station located centrally within the City with a fleet of five apparatus including one engine, one tanker/tender, one grass unit, one utility, and one ambulance that is owned by Ellendale Ambulance. The department serves approximately 30.5 square miles with a population estimated at 1,000 within the City of Geneva and the Townships of Bath and Geneva. The resulting population density is 32.8 persons per square mile. The community is a mix of rural residential and agricultural properties

Glenville Fire Department (GVFD)

Founded in 1908, GVFD is an all-volunteer fire department within the governmental structure of the City of Glenville. The department is staffed with 27 volunteers including one Fire Chief, one Assistant Chief, one Training Officer, one Safety Officer, and 23 other responders.

Services are provided from a single facility located centrally within the City with a fleet of five apparatus including two engines, one aerial/ladder, one tanker/tender, and one grass unit. The department serves an area of 42 square miles with an estimated population of 1,566 in the City of Glenville and the Townships of Freeman and Shell Rock. The resulting population density is 37.3 persons per square mile. The community is a mix of light commercial, limited industrial/manufacturing, suburban and rural residential, and agricultural properties

Hartland Fire Department (HFD)

Founded in 1894, HFD is an all-volunteer fire department within the governmental structure of the City of Hartland. The department is staffed with 18 volunteers including one Fire Chief, one Assistant Chief, three Captains, and 14 other responders.

Services are provided from a single facility located centrally within the City with a fleet of two four apparatus including one engine, one tanker, one rescue/grass unit, and one utility vehicle. The community is a mix of rural residential and agricultural properties

Hayward Volunteer Fire Department (HVFD)

Founded c. 1930, HVFD is an all-volunteer fire department within the governmental structure of the City of Hayward. The department is staffed with 23 volunteers including one Fire Chief, two Assistant Chiefs, two Training/Safety Officer, and 18 other responders.

Services are provided from a single facility located centrally within the City with a fleet of two engines, one tanker/tender and one grass unit. The department serves an area of 60 square miles including the City of Hayward and the Townships of Hayward, Oakland, and Riceland. The community is a mix of rural residential and agricultural properties.

Hollandale Community Fire Department (HoFD)

Founded in 1948, HoFD is an all-volunteer fire department within the governmental structure of the City of Hollandale. The department is staffed with 29 volunteers including one Fire Chief, two Assistant Chiefs, two Captains, one Training Officer, and 23 other responders.

Services are provided from a single facility located centrally within the City with a fleet of five apparatus including two engines, one tanker/tender, one rescue/medical response vehicle, and one grass unit. The department serves an area of 63 square miles with a population of 1,470 within the City of Hollandale and the Townships of Geneva, Moscow, Newry, and Riceland resulting in an overall population density of 23.3 persons per square mile. The community is a mix of residential and agricultural properties and maintains an ISO Class 7 rating according to the PPC.

London Community Fire Department (LCFD)

Founded c. 1960, LCFD is an all-volunteer fire department that operates as a joint powers agreement between the Townships of London and Oakland in Freeborn County and Lyle Township in Mower County. The department is staffed with 21 volunteer personnel including one Fire Chief, one Assistant Chief, one Training Officer, and 18 other responders.

Services are provided from a single facility with a fleet of three apparatus including one engine, one tanker/tender, and one grass unit. The department serves an area of 54 square miles with a population of approximately 370 resulting in a population density of 6.9 persons per square mile. The community is a mix of rural residential and agricultural properties.

Manchester Volunteer Fire Department (MFD)

MFD is an all-volunteer fire department within the governmental structure of the City of Manchester. The department is staffed with 16 volunteer personnel including the Fire Chief, two Assistant Chiefs, two Captains, and eight other responders.

Services are provided from a single station centrally located within the City with a fleet of two engines, one tanker/tender, and one light rescue. The department serves a population of 579 in an area of 409 square miles consisting of the City of Manchester and the Townships of Manchester and Bancroft. The resulting population density is estimated at 14.5 persons per square mile. The community consists of mostly residential and agricultural properties.

Myrtle Community Fire Protection Association (MCFD)

Founded c. 1950, MCFD is an all-volunteer fire department that operated as a private, non-profit corporation (501(c)3). The department is staffed with 26 volunteer personnel including one Fire Chief, one Assistant Chief, and 23 other responders.

Services are provided from a single station located in the City of Myrtle with a fleet of three apparatus including one engine, one tanker/tender, and one grass/medical unit. The department serves an estimated population of 1,186 in an area of 46 square miles including the City of Myrtle and the Townships of London, Oakland, and Shellrock. The resulting population density is 6.9 persons per square mile. The community consists primarily of rural residential and agricultural properties and maintains an ISO Class 10 rating according to the PPC. The area does not have a water tower and is not hydranted, resulting in the Class 10 rating.

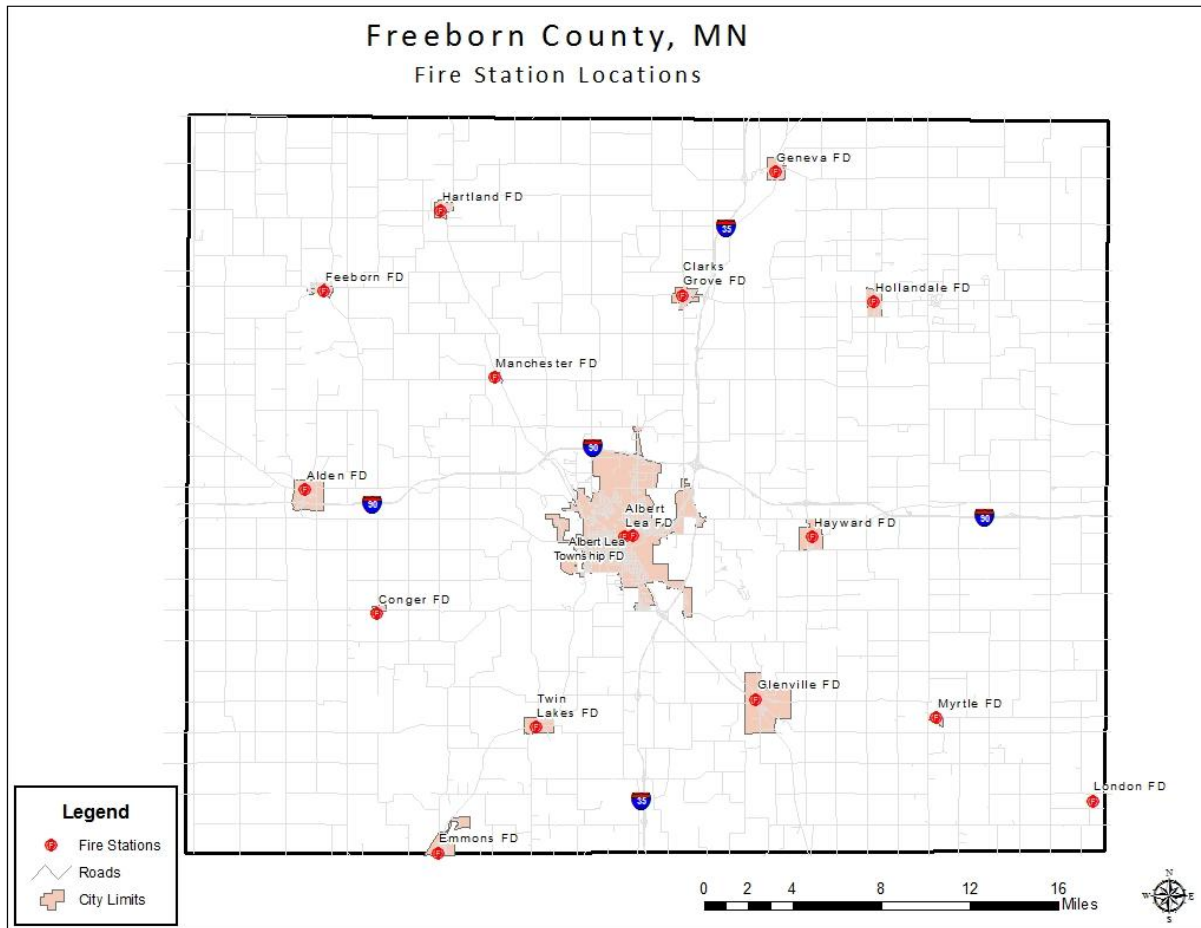
Twin Lakes Volunteer Fire Department (TLVFD)

Founded in 1962, TLVFD is an all-volunteer fire department within the governmental structure of the City of Twin Lakes. The department is staffed with 10 volunteer personnel including the Fire Chief and nine other responders.

Services are provided from a single facility located centrally within the City with a fleet of two apparatus including one engine and one tanker/tender. The department serves a population of 151 in an area of 0.5 square miles resulting in a population density of 300 persons per square mile. The community consists of predominantly rural residential and agricultural properties.

The following figure illustrates the extent of the study area along with station locations and existing response areas.

Figure 1: Study Area Base Map



Foundational Policy Documents

Foundational policy documents are those policies, manuals, and handbooks that provide general direction to all personnel within an organization. Within municipal organizations, these documents can include city personnel or human resources policies and/or manuals. Most emergency services organizations also maintain at least some level of administrative and operational guidelines/policies commonly referred to as standard operating guidelines/procedures (SOG/SOP). In addition, some volunteer non-profit organizations also maintain a constitution and by-laws that outlines membership in the organization as well as other general rules and regulations.

The study departments have varying levels of foundational policy documents. ESCI briefly reviewed each agency's documents to ensure that they covered the most common topics and provided both administrative and operational aspects of the organization including critical civil liability policies. The figure below summarizes the foundational policy document elements of the study agencies.

Figure 2: Summary of Foundational Policy Documents Elements

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Titles of Policy Documents	SOPs, Safety and Health Program	SOGs, City Policies	SOGs, bylaws	SOGs	SOGs	SOGs	SOGs, Bylaws	SOGs, Bylaws	SOGs	SOPs	SOGs	SOPs, bylaws	SOPs	SOGs	None	None
Quality of Administrative Policy Documents	Reasonably well organized, but missing a few important components	Well organized and complete	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Unknown	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	Reasonably well organized, but missing a few important components	None	None
Important Civil Liability and Risk Management Policies Present	No	Yes	No	No	No	Unknown	No	Some present, but not complete	No	No	No	No	No	No	No	None
Quality of Standard Operating Policies	Reasonably well organized	Very good	Reasonably well organized	Some present, but not complete	Reasonably well organized	Unknown	Reasonably well organized	Reasonably well organized	Some present, but not complete	Reasonably well organized	Reasonably well organized	Reasonably well organized	Reasonably well organized	Reasonably well organized	None	None
Adequate Operational Scene Guidance	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No

The following figure is a recommended list of policies and/or procedures that should be included in a comprehensive set of SOG/SOPs.

Figure 3: Recommended SOG/SOP Topics

Emergency Ops	
<i>Alarms and Response Procedures</i>	<i>Command Operations</i>
Alarm Response Procedures	General Strategic Guidelines
Alarm Response Areas	Incident Management System
Automatic Aid	Command Post Procedures
Mutual Aid	Welfare
Contractual Agreements	Helicopter Operations
<i>Fire Company Operations</i>	Public health Considerations
Standard Company Operations	Incident Critique
First to Arrive Duties	Area Evacuation
Returning Companies to Service	Incident Command Resource Request
Use of Civilians	Building Evacuation
Fire Scene Investigations	<i>Firefighting</i>
High Volume Smoke Removal System	Metal Fires
Personal Alert Safety Devices	Structure Fires (General)
On-Scene Equipment Inventory	Operations in Sprinklered Buildings
Personnel Accountability System	On-Site Auxiliary Fire Equipment
2 IN 2OUT	High Rise Fires
Initial Fireground Operations	Wildland Fires
Fluorescent Safety Vests	Vehicle Fires
Highway Incident Safety	Fire Stream Management
<i>Medical Emergencies</i>	Industrial Dumpster Fires
Operational Guidelines for Medical Aid Responses	Fire Watch Detail
Operations with Ambulance Personnel	Fires in US Mailboxes
Emergency Medical Technician - Defibrillator (EMT-D)	Special Local Hazards
Major Medical Incidents	High Rise Pack
Triage	Bowstring Truss Roof - Operations Procedures
Exposure to Infectious Diseases and Hazardous Materials	Carbon Monoxide Hazards
Suspected Drug Overdose	Thermal Image Camera
Animal Bites	<i>Electrical Emergencies</i>
Vial of Life and Medic Alert Tags	Electrical Emergency Operations
Attempted Suicide	<i>Rescue Operations</i>
Suspected Homicide	Vehicle Rescue and Extrication
DOA (Dead on Arrival)	Life Line Operations
Suspected Child Abuse	Rescue from Machinery
Suspected Sexual Assault	Escalator Emergencies
Hospital Disaster Notification	Elevator Emergencies
EMS Reports	Cave-in and Manhole Rescues
EMS Radio Procedures	Building Collapse
Drug Box Exchange Policy	Rescue at Structure Fires
BLS Rules and Regulations	
ALS Rules and Regulations	

<i>Transportation Emergencies</i>	<i>Hazardous Materials Incidents</i>
Interstate Operations	Hazardous Materials (General)
Railroad Emergencies	Flammable Fuel Spill (Liquid or Gas)
Aircraft Emergencies	LPG Emergencies
	Fumigation Emergencies
	Explosives and Bombs
	PCB's
	Pesticide Procedures
	Radioactive Materials
	Natural Gas Filled Structures - No Fire
	Natural Gas Fed Fire - Inside Structure
	Broken Natural Gas Main - Fire
	Broken Natural Gas Main - No Fire

Budget, Funding, Fees, and Taxation

All organizations, regardless of type or size, require adequate funding in order to continue to operate. Fire departments are no different. Each department, depending on organizational design, will receive funding from one or more sources. For most municipal departments, a majority of that funding comes from the ad valorem taxes levied by the municipality. In today's economy, most municipalities are searching for ways to reduce overall costs and lower the tax burden on their residents. At the same time, however, emergency services organizations are experiencing an increase in overall service demand that, at times, can stretch an under-resourced department.

The study departments provided various levels of funding information for this project ranging from complete budget data to none at all. Each of the following sections provides a general overview of each department's funding and budgets over the range of data provided.

Figure 4: Summary of Budget Data

	2013	2014	2015	2016
Alden	\$70,055	\$108,775	\$57,370	\$57,500
Albert Lea*	\$1,263,803	\$1,464,874	\$1,496,757	\$1,592,256
Albert Lea TWP	\$22,000	\$22,000	\$22,000	\$22,000
Clark's Grove	0	0	0	0
Conger	0	0	0	0
Emmons	0	0	0	0
Freeborn	0	0	0	\$35,000
Geneva	0	0	\$19,710	0
Glenville	\$48,706	\$50,092	\$40,384	\$56,500
Hartland	0	0	\$33,000	\$33,000
Hayward	0	0	0	0
Hollandale	\$23,076	\$13,643	\$88,465	0
London	0	0	\$47,462	0
Manchester	0	\$13,461	\$9,783	0
Myrtle	\$25,995	\$72,190	\$31,716	0
Twin Lakes	\$5,000	\$5,000	\$5,000	\$5,000
Total	\$1,460,648.00	\$1,752,049.00	\$1,853,662.00	\$1,803,272.00

*Does not include administration costs, which are grouped into Public Safety.

CAPITAL ASSETS AND CAPITAL IMPROVEMENT PROGRAMS

Three basic resources are required to successfully carry out the mission of a fire department — trained personnel, firefighting equipment, and fire stations. No matter how competent or numerous the firefighters, if appropriate capital equipment is not available for use by responders, it is impossible for a fire department to deliver services effectively. The capital assets that are most essential to the provision of emergency response are facilities and apparatus (response vehicles).

Facilities

Fire stations play an integral role in the delivery of emergency services for a number of reasons. A station's location will dictate, to a large degree, response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. Fire stations also need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization, its workers, and/or its members. It is important to research need based on call volume, response time, types of emergencies, and projected growth prior to making a station placement commitment.

Each of the fire departments included in the study operated from a single fire station. ESCI toured each of the stations operated by the fire departments, resulting in the observations listed in the following figures.

Figure 5: Summary of Capital Facilities

Station	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Date Built	1978	1968	Estimated late 1960s	1982	Unknown	Unknown	Unknown	1983	2006	Unknown	Late 1960s	1960s	1999	Unknown	1990	1962
Overall Condition	Good	Poor to Fair	Poor	Good	Fair	Fair	Good	Fair	Excellent	Good	Fair	Fair	Good	Fair	Very good	Fair but aging
Apparatus bays	Two, double-depth, back-in apparatus bays	3, double depth plus 4 separate garage stalls for support vehicles	Three apparatus bays. All are single depth and back-in configuration	4, back in, single bays	Two, double depth, back-in apparatus bays	Three back-in, single depth apparatus bays	Three back-in, double depth bays. Attached to city hall.	Three, double depth apparatus bays are back-in configuration	Four, back-in bays. All are single depth.	Two back-in bays are double in depth	Two, double-depth apparatus bays are back-in	3 double depth bays, one of which is drive through plus one single back-in bay	4, single bays, all back-in configuration	Four, single depth, back-in bays house an engine, mini-pumper, tanker and rescue	3, single depth, back-in apparatus bays	2, back-in bays, single depth
24-Hour Crew quarters	None	Present for six responders	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Training Room	Small classroom in an office and kitchen area	One in the quarters area and a conference room on the lower floor	A small kitchen and meeting area is in the apparatus bay area	A small meeting room accommodates approximately 20	Kitchen table in the apparatus bays	Meeting space is available	Meeting area is a storage area above the apparatus bays.	Table in the apparatus bays is used for meetings and training	A large meeting room is in a city that is adjacent to and accessible by the fire department	Meeting area is available in the city hall which is in the same building as the fire department	A good sized meeting room is in that station and includes a kitchen	A meeting room seats approximately 20	A meeting table is in the apparatus bays	Small meeting area is present with a small kitchen	A meeting table and small kitchen space is in the apparatus bays	Fire department has access to the adjacent Community Meeting Room
Exercise Room	None	None	None	None	None	None	Some exercise equipment in the meeting area	None	None	None	None	None	None	None	None	None
Auxiliary Power	None	None	None	None	None	None	None	None	Mobile generator is available for connection	None	None	None	None	None	None	None
Storage adequacy	Limited	Inadequate storage, no room for additional apparatus	Station is very small and space is very limited	Adequate	Adequate but most storage space is full	All space is at maximum capacity	Storage is adequate	Space is maximized in the station. There is no extra room for more apparatus or equipment	Adequate but limited	Adequate but storage is limited	Adequate but limited	None	None	Limited	None	Minimal storage or extra space

Station	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Future viability	Adequate for current use but maximized	Inadequate for current use. Future use is limited.	The station is aging and has maintenance issues. There is not room for expanded use.	Apparatus bays are filled, little room for expanded use	Adequate for current use but maximized	Adequate for current use but maximized	Adequate for current use but no room for additional apparatus	The facility is in fair to good condition but space is limited for any expansion	Station is in excellent condition and serviceable well into the future. Bays are full, however.	Adequate for current use but maximized	There is no room for additional apparatus but the station is well maintained and serviceable for its current use. Bay doors are very narrow.	Apparatus bays are filled, little room for expanded use	One bay houses a plow truck; otherwise bays are full. Limited room for additional equipment.	Apparatus bays are filled, little room for expanded use	Station is in very good condition and will continue to serve the agency for some time. There is no additional space for added apparatus	Adequate for current use but maximized
Offices	Desk in the classroom, kitchen area	Administrative offices on the lower floor and additional workspaces in the crew quarters	None	None	None	Desk in the meeting room	In the meeting area	One office in the apparatus bay area	One office is in the apparatus bay area	None	None	Single office in meeting area	None	None	None	None
Smoke Detection Present	None	Yes	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Fire Sprinkler System Present	None	Building is fully protected	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Apparatus Exhaust Systems Installed	None	On all front line apparatus	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Fire stations in the study area vary broadly from some that are new and in excellent condition to others that are aging and due for replacement before long. Some of the stations observed are close to or have reached their maximum capacity in terms of room for future expansion that can be expected as workload and service demand increases.

From the perspective of potential shared service delivery, it is important that fixed facilities like fire stations be carefully taken into consideration, depending on the degree to which the agencies may elect to combine future efforts. If the fire departments will remain separate, independent agencies that simply collaborate with each other, the concern is lessened. However, when evaluating more structured options for future shared service delivery initiatives, including legal unification, fire stations and their continued viability become a critical factor. If agencies choose to combine formally, one with comparatively new and adequate fixed facilities may inadvertently inherit a financial liability that comes with another fire department that has capital assets. Due to their considerable expense, the potential financial liability that may be realized in regard to some facilities must not be discounted.

Apparatus

Response vehicles are the most important resource of the emergency response system, second only to personnel. If emergency responders cannot arrive at an incident quickly and safely due to unreliable transportation, or if the equipment does not function properly, the delivery of emergency service is likely compromised.

Fire apparatus are unique and specialized pieces of equipment, customized to operate efficiently for a narrowly defined mission. For this reason, fire apparatus are very expensive and offer little flexibility in use and reassignment. As a result, communities always seek to achieve the longest life span possible for these vehicles. ESCI reviewed the apparatus present in the study area fire stations and made the following observations:

Alden Fire Department

The Alden Fire Department operates five fire apparatus. The units are in good to excellent condition overall and it is readily apparent that the agency cares for its equipment carefully.

Figure 6: Alden Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
929	Structural engine	1995	Central States	Good		1,000	1,250
928	Tanker	2008	Pierce	Excellent		500	2,100
927	Grass/Foam Unit	1997	Ford F-350	Good		125	325
926	Rescue	2015	Ford F-550	New		-	-
Wildland	Grass	2016	Polaris/Firelite	New		30	85

The oldest piece of fire apparatus is a 1995 structural engine which, while aging, remains serviceable. The tanker is 8 years old and the grass/foam vehicle is 19 years of age, while the wildland unit is nearly new. Overall, Alden apparatus averages just under ten years in age.

Albert Lea Fire Department

The Albert Lea Fire Department operates a fleet of two fire engines and one aerial ladder truck, along with several staff and support vehicles. All appear to be well maintained and fully serviceable and in excellent condition. They are detailed in the following figure.

Figure 7: Albert Lea Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 1	Structural engine	2015	E-One	Excellent	5	1,500	1,000
Engine 2	Structural engine	2006	Pierce	Good	5	1,500	1,000
Ladder	Aerial	1993	Pierce	Good	4	-	-

Albert Lea's major apparatus range in age from 1 to 23 years with an average age of 11 years. The engines are newer and in good to excellent condition. The 1993 ladder truck is 23 years old and will reach its typically expected service life soon and need to be considered for replacement.

Albert Lea Township Fire Department

Albert Lea Township has a single station that is located in a converted gas station. In the station is a single fire engine, a water tanker and a grass fire response vehicle.

Figure 8: Albert Lea Township Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 920	Structural engine	1999	Toyne Spartan	Good	4	1,500	1,000
Tanker 922	Water tanker	1992	Chevrolet Kodiak	Good	2	-	1,800
Grass 921	Grass	2010	Ford	Excellent	4	300	300

The structural engine is owned by the city of Albert Lea, not by the Township. The others are Township owned and all are in good to excellent condition. The average age is 9 years.

Clark's Grove Fire Department

The Clark's Grove Fire Station houses four apparatus including one fire engine, a water tanker and a grass /rescue unit and a grass vehicle.

Figure 9: Clark's Grove Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
931	Structural engine	2003	Central States	Very good	2	1,250	
932	Water tanker	2016	Midwest Fire	New	1	500	3,000
933	Grass/rescue	2005	Ford	Very good	1	200	200
930	Grass	2000	Ford	Good	1	200	-

The Clark's Grove equipment is generally newer than some of the other agencies, averaging 10 years of age overall.

Conger Community Fire Department

The Conger Community Fire Department operates from a total of four vehicles, including two engines, a tanker, and a combination grass fire and rescue vehicle.

Figure 10: Conger Community Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
936	Structural engine	2001	International	Very good	2	1,250	1,800
936 (reserve)	Structural engine	1970	International	Aging	2	750	500
932	Water tanker	1972	Military	Poor	2	-	2,000
938	Rescue/grass	2014	Dodge	Excellent	2	250	300

Conger's equipment ranges in age from 2 to 46 years in age, with an average age of 27 years. While the vehicles are well cared for and properly maintained, two will be due for replacement in the near future or have already exceeded their service lives.

Emmons Fire Department

Listed below is Emmons Fire Department's major apparatus. There are two engines, two water tankers and one grass fire vehicle. They are listed below:

Figure 11: Emmons Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
GMC Pumper	Structural engine	2008	GMC	Good	2	1,000	1,000
Ford Pumper	Structural engine	1976	Ford	Fair	2	750	750
GMC	Water tanker	2009	GMC	Very good	2	250	750
Freightliner	Water tanker	1988	Freightliner	Fair	1	-	3,000
Ford	Grass	2013	Ford	Very good	1	250	250

The 1975 Ford Pumper is 40 years of age and has exceeded what is typically considered an appropriate service life. The Freightliner Tanker 28 years old and will be due for replacement in the relatively near future. The other vehicles are newer and in generally good condition, with an average age of 17 years overall.

Freeborn Volunteer Fire Department

The Freeborn Volunteer Fire Department operates a fleet of four response apparatus. Two are engines, and the other two are water tankers.

Figure 12: Freeborn Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
E947	Structural engine	2009	Rosenbauer	Very good	2	1,500	1,000
E949	Structural engine	2001	Rosenbauer	Very good	2	1,000	1,000
T947	Tanker	1979	Laverne	Good	1	350	300

The department's newest engine is 5 years of age and is in excellent condition. The other structural fire engine 7 years in age. The average age of the total apparatus fleet is 18 years. The 1979 water tanker is 37 years of age and due for replacement.

Geneva Fire Department

GFD operates a single engine, water tanker brush and utility vehicle.

Figure 13: Geneva Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 951	Structural engine	1999	Freightliner/Central States	Good		1,250	1,000
Water 953	Water tanker	2000	Freightliner	Excellent		500	3,000
Brush 954	Grass and brush	1975	Dodge Power Wagon	Fair		250	250
Utility	Utility pickup	2005	Ford	Excellent	-	-	-

The Geneva apparatus averages 17 years of age overall. The department's engine is 17 years of age and the water tanker is 16.

Glennville Fire Department

Glennville apparatus average 16.2 years overall, as listed below.

Figure 14: Glennville Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Unit 1	Structural engine	1996	Pierce Saber	Good	4	1,250	500
Unit 4	Structural engine	2011	Pierce Saber	Excellent	4	1,500	1,000
Unit 3	Tanker	1993	Freightliner	Good	1	90	3,000
Unit 5	Ladder	1986	E-One	Fair	4	1,500	300
Unit 2	Brush	2013	Ford F350	Excellent	2	300	300

Glennville maintains a very good fleet of response apparatus. Most is newer and in very good condition. The ladder truck is 30 years of age; however, it underwent a substantial renovation in 1997. That renovation extended the acceptable service life considerably, however, even so it will be due for replacement in the near future.

Hartland Fire Department

Three vehicles constitute the Hartland Fire Department fleet of response apparatus. Included is one engine, one engine/tanker and one grass/brush unit.

Figure 15: Hartland Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
961	Structural engine	1993	Central States	Good	2	1,500	1,000
962	Engine/tanker	2002	Pierce	Very good	2	1,000	1,000
963	Grass/rescue	2000	Ford	Good	1	300	300

The department's newest engine is 14 years of age and is in very good condition. The other structural fire engine is 23 years in age and approaching its acceptable service life. The average age of the total apparatus fleet is 17 years.

Hayward Fire Department

ESCI observed the apparatus in the Hayward Fire Station, listed in the next table.

Figure 16: Hayward Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Pumper	Structural engine (mini-pumper)	1995	International	Good	2	1,250	1,500
Pumper	Structural engine	1974	International	Good	2	750	750
Tanker	Tanker	2003	International	Good	1	-	2,400
Grass	Grass/medical	2009	Ford	Good	2	150	250

Hayward Fire Department's newest vehicle is seven years of age and its oldest is 42. In total, the vehicles average 20.75 years.

Hollandale Fire Department

In the Hollandale Fire station are four pieces of apparatus, including two fire engines, a tanker and a grass vehicle and an EMS response unit. They are listed in the following table.

Figure 17: Hollandale Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
9703	Structural engine	1976	Pierce	Fair	2	750	500
9704	Structural engine	1997	Freightliner	Good	2	1,250	650
9705	Tanker	1995	International	Fair	2	190	2,000
9702	Grass	2000	Ford F550	Fair	2	134	200
EMS	1 st Responder	1995	Chevrolet	Good	2	-	-

One of Hollandale's Structural engines is 40 years of age and, while used primarily as a reserve, has exceeded its reasonably anticipated service life. The remaining equipment is newer and the fleet averages 23 years of age overall.

London Community Fire Department

The London Community Fire Department has three pieces of response apparatus. They are listed in the following table:

Figure 18: London Community Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Pumper	Structural engine	1986	Ford/General	Good	2	1,500	750
Tanker	Tanker	2015	Kenworth	Excellent	2	500	3,000
Grass Rig	Grass	1994	Ford	Fair	1	200	300

Overall, the vehicles average 17 years with the structural engine the oldest at 30 years. The tanker is new and the grass truck is 22 years old.

Manchester Fire Department

The Manchester Fire Department's single fire station houses one fire engine along with a mini pumper, a water tanker and a rescue vehicle. In addition, Buffalo Lake operates three water tankers, one of which is owned by the Department of Natural Resources, and two grass fire vehicles.

Figure 19: Manchester Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
983	Pumper	1993	Chevrolet Kodiak	Good	2	1,000	1,000
981	Mini-pumper	1981	Chevrolet 30	Good	2	400	150
982	Water tanker	2000	Chevrolet 8500	Good	1	-	2,000
984	Rescue	2009	Chevrolet pickup	Good	2	-	-

It is apparent from observing Manchester's vehicles that they are well cared for, demonstrating pride in ownership. The newest piece of equipment is seven years of age, while the oldest is 35 years old. The average age is 20 years.

Myrtle Community Fire Department

Myrtle apparatus averages 15 years of age overall, as listed below:

Figure 20: Myrtle Community Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Pumper	Structural engine	2001	International	Good	2	1,500	1,250
Tanker	Water tanker	1999	Freightliner	Good	1	-	4,000
Brush	Brush/First Response	2002	Ford F550	Good	1	150	250

The department's engine is 15 years of age and the water tanker 17. The brush vehicle is 14 years old.

Twin Lakes Fire Department

The Twin Lakes Fire Department has two response vehicles. An engine and a water tanker, as detailed below.

Figure 21: Twin Lakes Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine	Structural engine	1985	Pierce	Good	2	1,250	500
Tanker	Water tanker	1982	Mack	Fair	1	500	5,000

With an average age of 32 years, Twin Lakes engine is 31 years old and the tanker is 34. The units have reached what is generally considered to be an accepted service life, but remain operational at this time.

Capital Replacement Planning

When considering joining multiple agencies in some manner, it is important to evaluate the future, long range, costs that can be anticipated for the replacement of major capital assets. The most expensive capital items that make up a fire department are facilities (fire stations) and major apparatus, including fire engines and water tankers.

ESCI reviewed capital replacement planning methods in the participating agencies. As is commonly the case with small, rural fire departments, some of the agencies have not established a structured or formalized capital replacement schedule, nor have they set aside funding for the future replacement of capital assets.

Several of the agencies participating in this study, however, have taken more steps toward looking toward their future needs than most. The participant's approaches are summarized below:

Alden

A capital reserve fund is in place in Alden for rolling stock. The available funds are generally adequate but may be supplemented from other sources.

Albert Lea Fire Department

The City of Albert Lea has a Capital Improvement Plan in place that includes a vehicle replacement schedule. The schedule is currently funded for engine replacement, however funds for replacement of the ladder truck are not dedicated.

Albert Lea Township

Albert Lea Township does not have an established replacement schedule; however, the township has set aside funding in the past for vehicle replacement.

Conger Fire Department

In Conger, a city fire equipment fund contains dedicated funding. All funds from service contracts go into the fund. No formal schedule is in place, but funding available.

Emmons Fire Department

In Emmons, some funding has been set aside for future apparatus needs. A replacement schedule is not in place, but some planning has been developed. Donations are used to supplement available funding, along with bank loans, when needed.

Freeborn

In Freeborn, both the city and township maintain funds for apparatus replacement. However, usually it is necessary to supplement available funding with lease purchase dollars.

Glenville

A well-developed Capital Improvement Plan is in place. All apparatus is paid for currently and \$20-25,000 is set aside annually for apparatus replacement. Amounts may be adjusted upward if a higher expenditure is anticipated.

Hartland Fire Department

In Hartland, the city reserves funds for apparatus replacement and fund raisers are used to supplement, as needed. There is not a formal replacement schedule.

The Twin Lakes, Clark's Grove, Manchester, Hollandale, Myrtle, Hayward, and Geneva have not established structured capital replacement plans.

Looking forward, should a change in governance of some or all of the fire department be undertaken as a shared service delivery initiative, apparatus replacement planning will become increasingly important. The participating agencies are advised to establish a structured replacement schedule with calculated future costs and identified funding strategies.

ESCI offers the vehicle replacement schedule below as one example of service lives and replacement values.

Figure 22: Example Vehicle Replacement Life and Cost

Description	Useful Life	Replacement Cost
Engine	20	500,000
Aerial Ladder Truck	25	950,000
Wildland Engine	15	75,000
Rescue	15	75,000
Water Tender	25	300,000

The service lives assume that all vehicles will be placed in reserve status for five years prior to disposal. The table above is an example only and it is recognized that frequency of use (call volume), which is lower in the study agencies than other instances, may warrant the use of extended replacement life estimates.

When evaluating the options for shared service delivery, or the feasibility of combining agencies into one or more entities, it is essential to consider the costs that can be expected for future replacement of major equipment. Apparatus service lives can be readily predicted based on factors including vehicle type, call volume, age, and maintenance considerations.

STAFFING

Without proper levels of personnel, apparatus and stations will sit idle and may not be readily available for emergency response. This section is intended to provide the reader with a review of the system's personnel management practices as compared to industry standards and to examine the department's ability to provide sufficient staffing resources for the risks that exist throughout the community

Administration and Support Personnel

The primary responsibility of a department's administration and support staff is to ensure that the organization's operational entities have the abilities and means to fulfill their mission at an emergency incident. Efficient and effective administration and support are critical to the department's success. Without adequate oversight, planning, documentation, and training the operational capabilities of the department may suffer and ultimately fail operational testing. The following figure summarizes the administrative and support complement within the study departments.

Figure 23: Summary of Administrative and Support Personnel

	ALFR	ALTFD	AFD	CGFD	CCFD	EVFD	FFD	GFD	GVFD	HFD	HVFD	HoFD	LCFD	MFD	MCFD	TLVFD
Public Safety																
Director			1													
Fire Chief	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
Deputy Chief			1			2										
Assistant Chief		2		1	1		1	1	1	1	2	2	1	2	1	
Total	1	3	2	2	2	3	2	2	2	2	3	3	2	3	2	1

Although the Chief Officers are identified here as administrative and support, they, like in most predominantly volunteer organizations, also work within the operational elements of the study departments.

Based on ESCI's anecdotal experience conducting similar studies, it has been found that many organizations that do not provide transport emergency medical services maintain an administrative and support to operations ratio in the range of 10 to 15 percent. Without the remaining administrative staffing data, ESCI cannot produce an accurate ratio for the study departments.

Operational Personnel

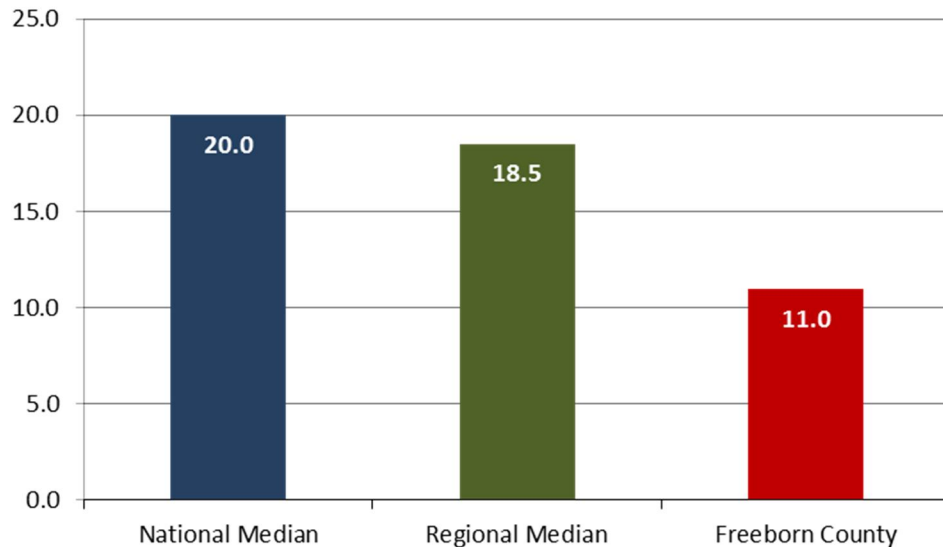
It takes an adequate and well trained staff of emergency responders to put the appropriate emergency apparatus and equipment to its best use in mitigating incidents. Insufficient staffing at an operational scene decreases the effectiveness of the response and increases the risk of injury to all individuals involved.

Figure 24: Summary of Operational Personnel

	AFD	ALFR	ALTFD	CGFD	CCFD	EVFD	FFD	GFD	GVFD	HFD	HVFD	HoFD	LCFD	MFD	MCFD	TLVFD
Captain	3	2	2	2	2	4	2	2		3		2		2		
Training/Safety Officer					1				2		2	1	1	2		
Lieutenant	3															
Apparatus Operator	3															
Firefighter/Responders	6	12	19	16	23	19	10	22	23	14	18	23	18	8	23	9
Total	15	14	21	18	26	23	12	24	25	17	20	26	19	12	23	9

Based on benchmarks provided by the NFPA, Freeborn County has a lower level of per 1,000 population personnel than similarly sized communities across the region and the nation as illustrated in the following figure.

Figure 25: Comparative Personnel Benchmarks



In an emergency services system like that found in Freeborn County, there are instances where career and volunteer personnel will function together on emergency scenes. This integration is critical to the success of the overall operation of the system. For the study departments, ALFR and ALTFD share volunteer personnel and those individuals are members of both departments.

It is important to remember that when personnel with varying statuses work together that equal respect is given to all involved. In some circumstances, volunteer personnel are viewed by career staff as less trained or less competent. To alleviate this potential, it is critical that the study department work together to establish consistent minimum levels of training and frequent joint training opportunities so that all responders can seamlessly integrate when working on an emergency scene.

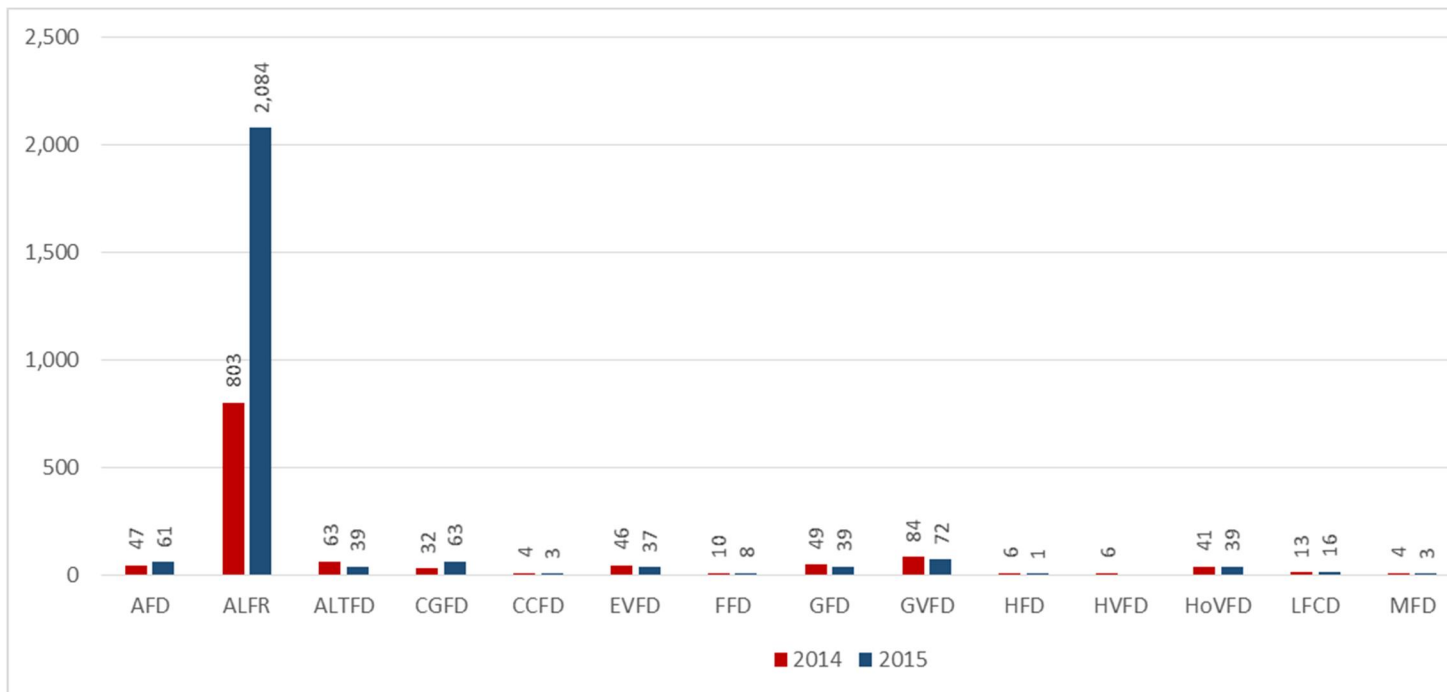
SERVICE DELIVERY AND PERFORMANCE

The most important aspect of any emergency services agency is its ability to deliver services when requested. This section of the report evaluates the current and historical service delivery elements of demand, distribution, concentration, and response performance.

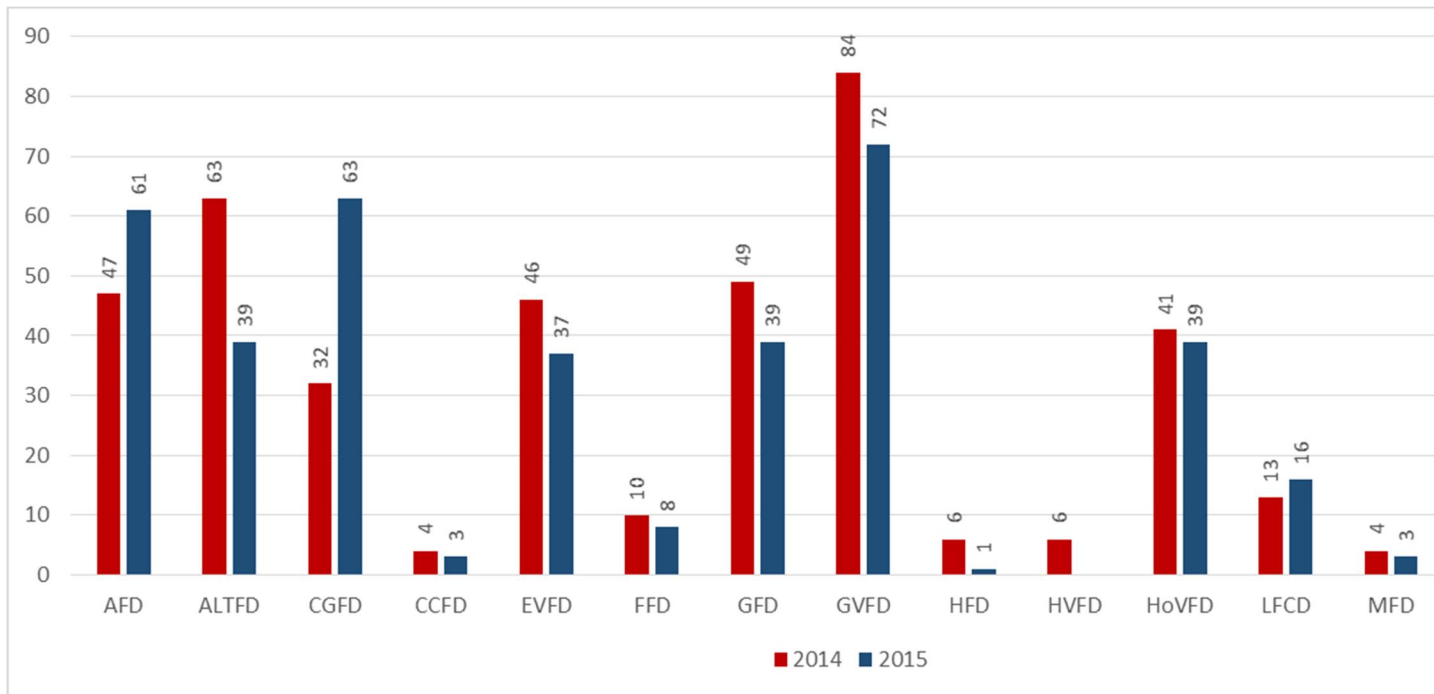
Demand

Service demand can be measured or defined in a number of ways. For the purposes of this report, service demand is considered all incidents responded to by Freeborn County units. The following figure summarizes the last two full years of workload for the study agencies.

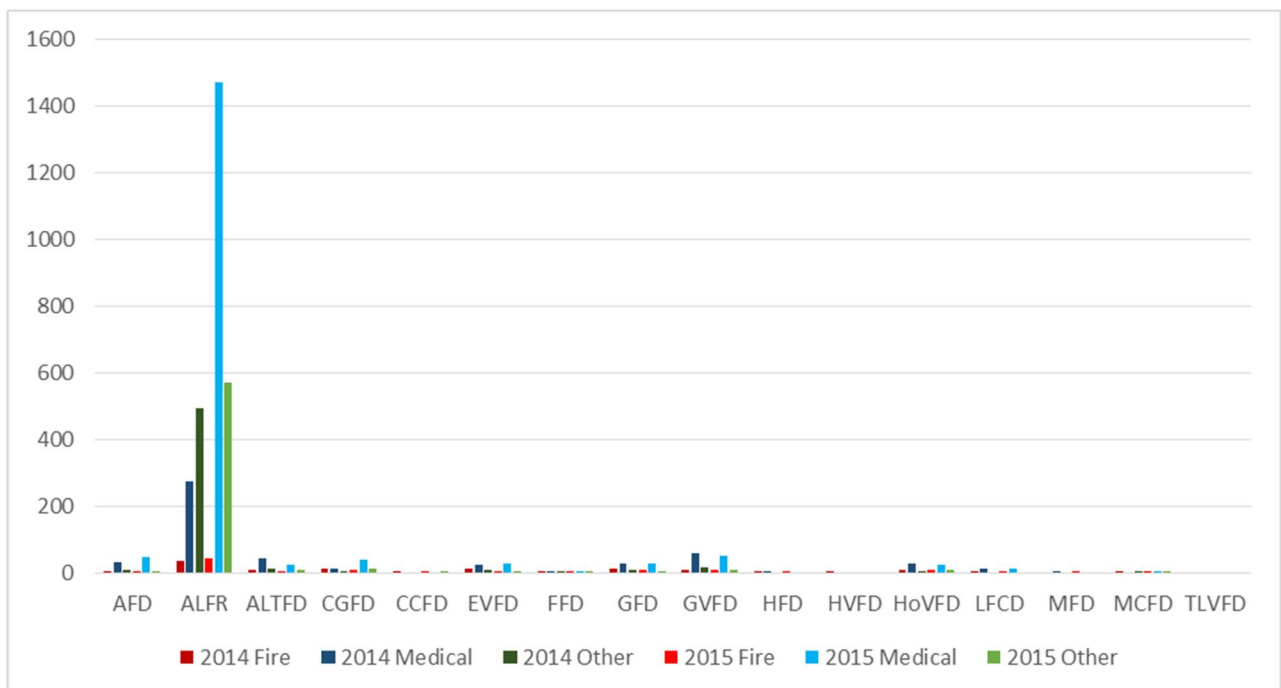
Figure 26: Overall Historical Service Demand



Based on the fact that ALFR is a predominantly career department serving an urbanized area, their service demand is significantly higher than the remaining departments. The following figure removes ALFR from the analysis and illustrates the more rural departments' overall demand.

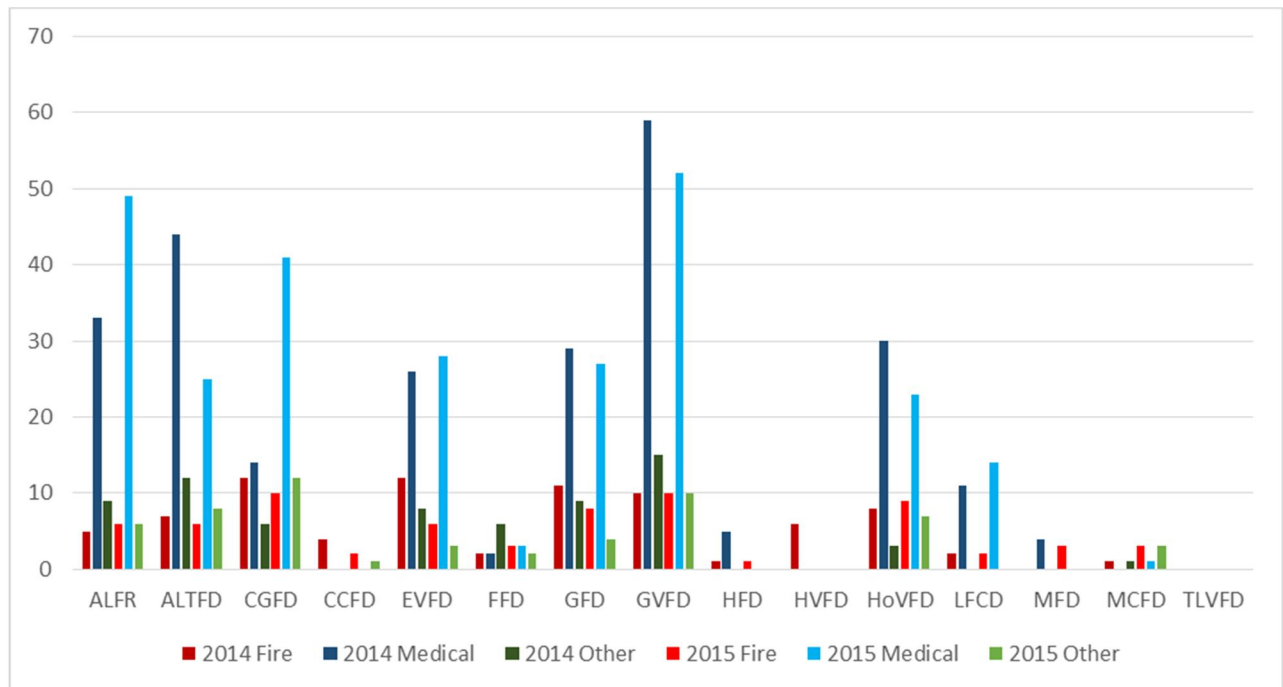
Figure 27: Overall Historical Service Demand (Without ALFR)

Although overall demand is an indicator as to how busy a department may be, it is also useful to evaluate service demand by incident type. For this analysis, ESCI categorized overall demand into fires (where something was actually burning), medical incidents (all types), and 'other' incidents, such as alarms, rescues, service calls, and public assists. This categorization is illustrated in the following figure.

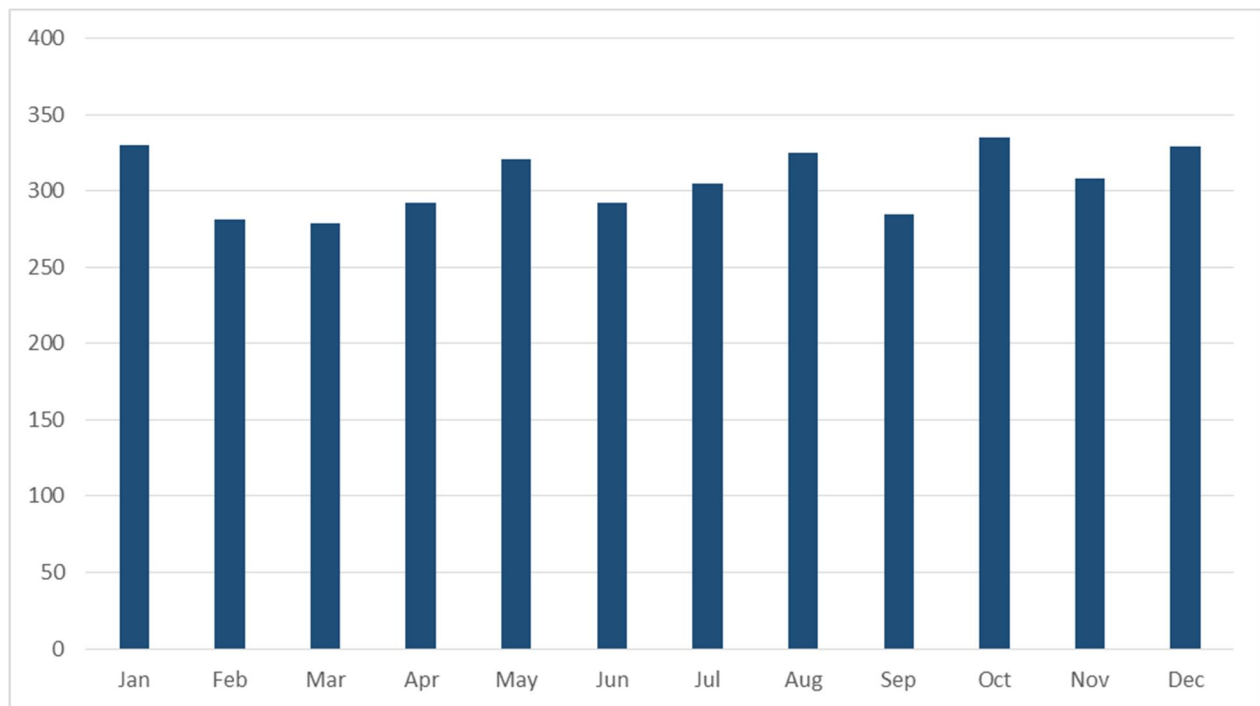
Figure 28: Service Demand by Incident Type

As with overall service demand, ALFR was removed from this analysis to show a more detailed view of the rural departments demand by incident type.

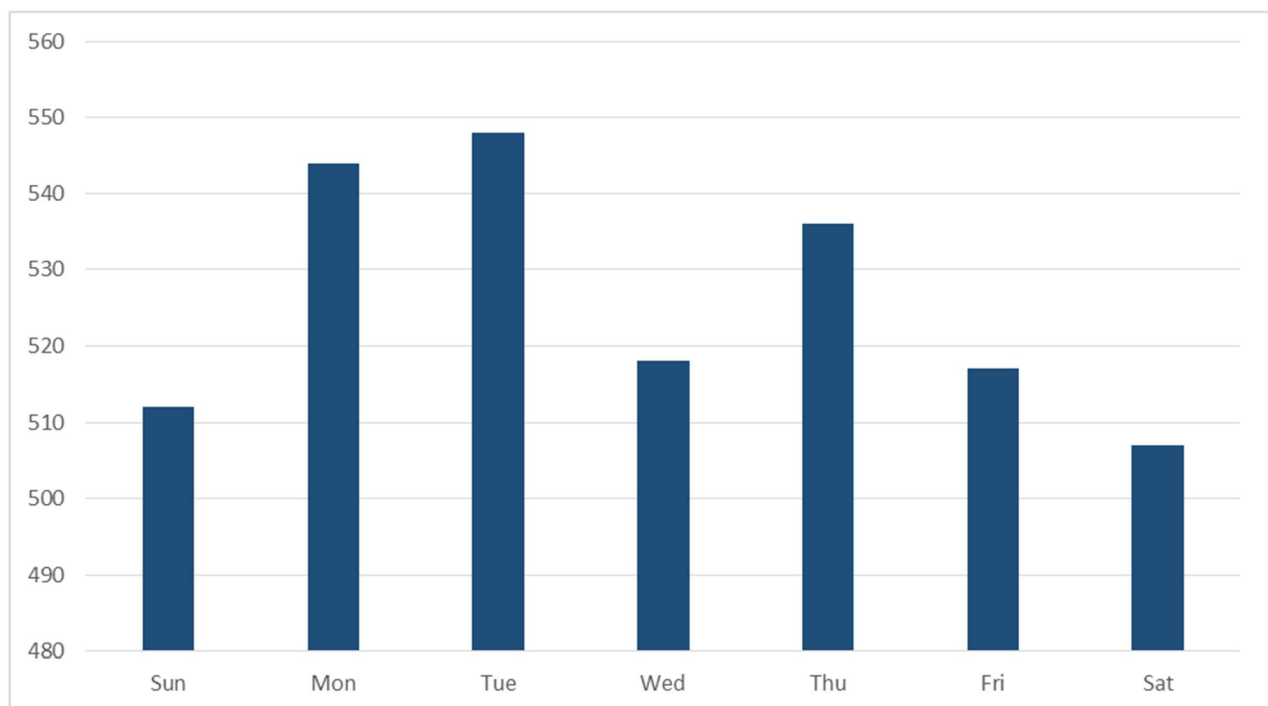
Figure 29: Service Demand by Incident Type (Without ALFR)



It is also useful to determine *when* incidents are occurring since that may help departments understand when, and if, they need to staff duty personnel. This temporal analysis begins with an evaluation of incidents by month and combines all the study departments to provide a regional perspective.

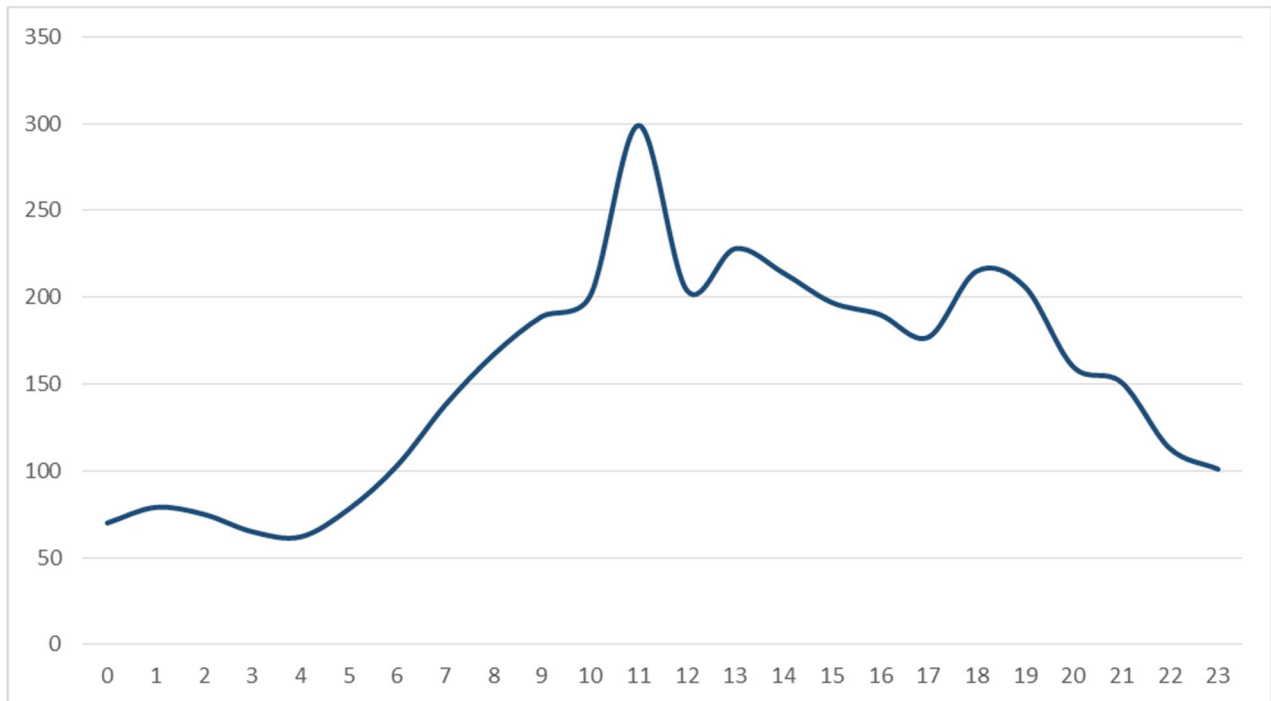
Figure 30: Service Demand by Month (2014 – 2015 All Departments)

Although varied, there is little in the way of a trend to indicate that any one month is significantly more busy than another. The second analysis evaluates service demand by day of week.

Figure 31: Service Demand by Day of Week (2014 – 2015 All Departments)

This analysis indicates that Monday, Tuesday, and Thursday are significantly more busy than the other days of the week. This could be related to general human activity during the normal workweek. The last temporal analysis evaluates service demand by hour of day.

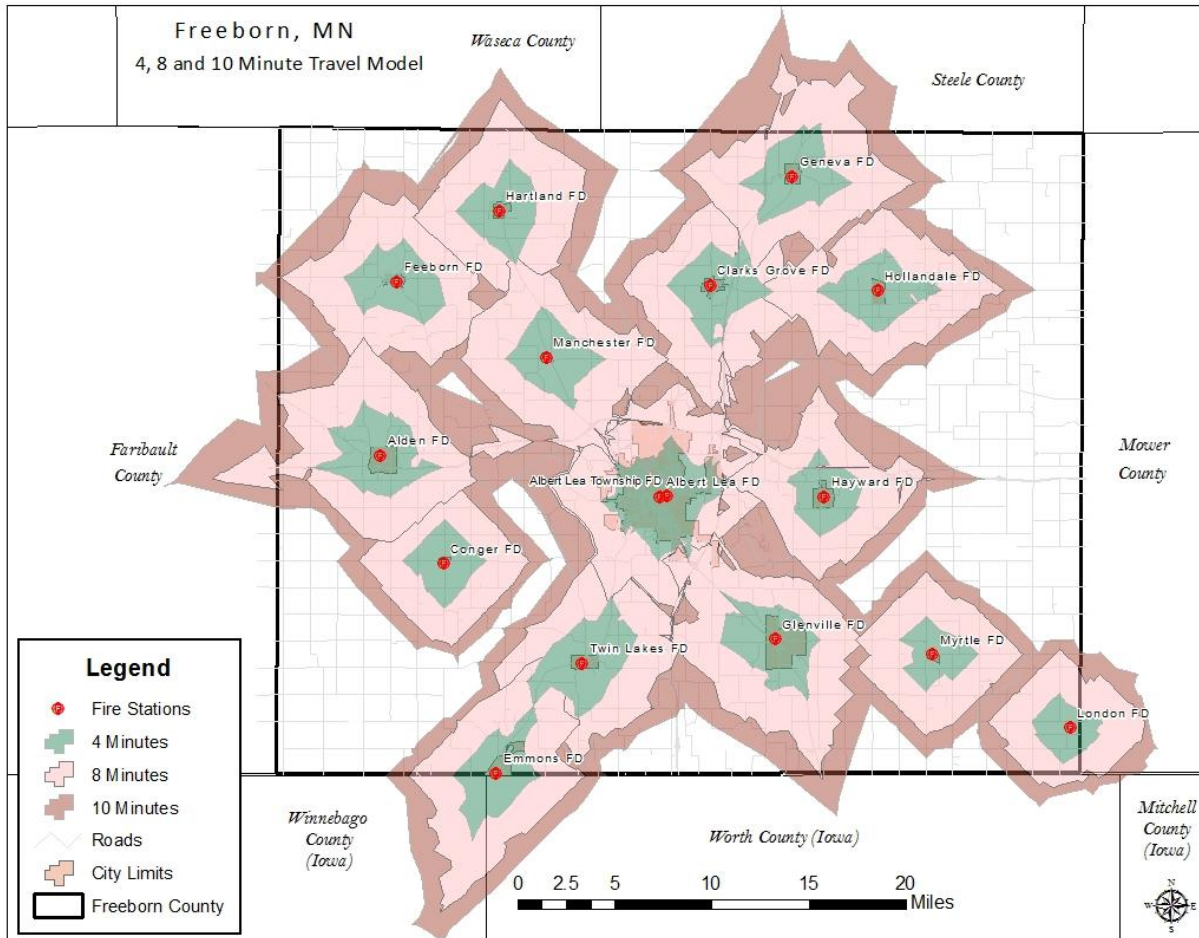
Figure 32: Service Demand by Hour of Day (2014 – 2015 All Departments)



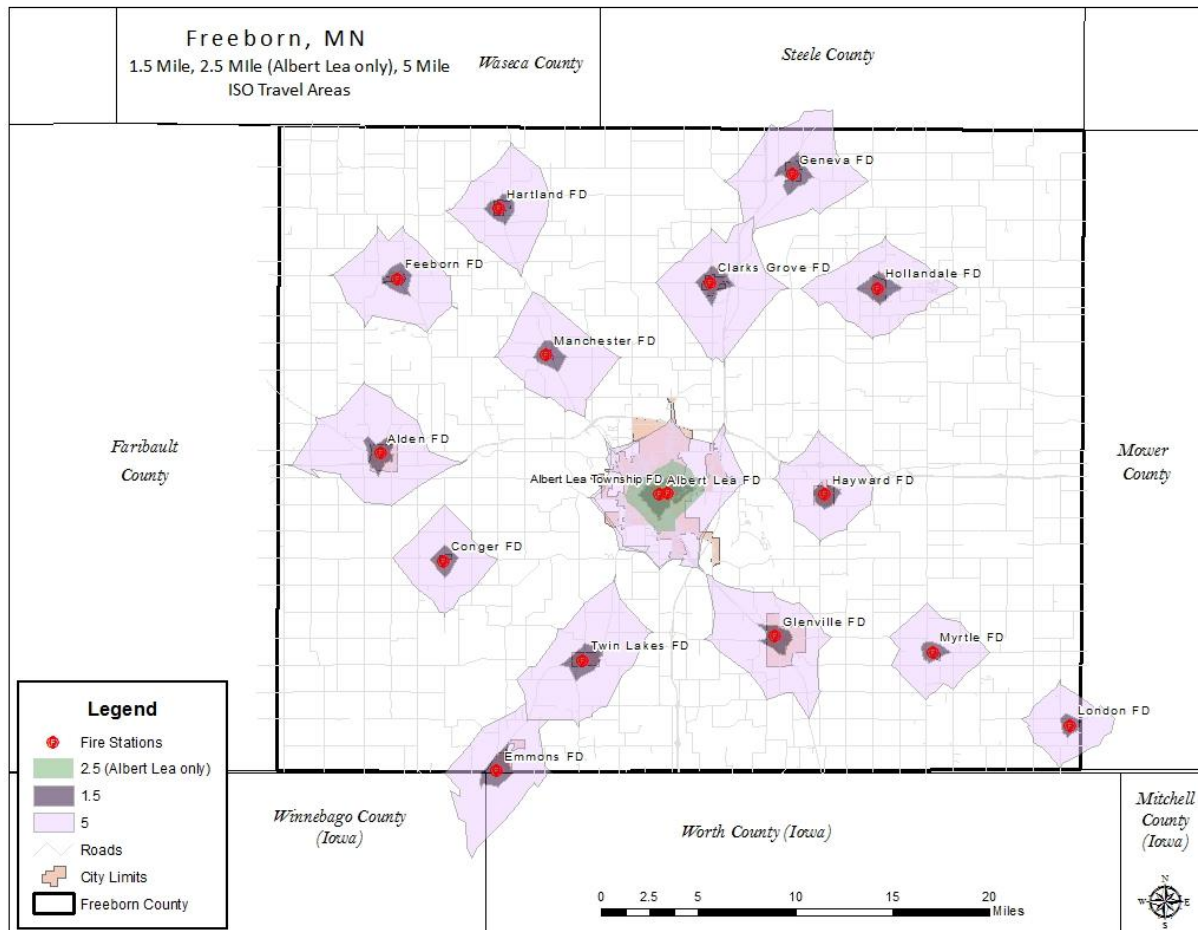
From this analysis, it is clear that service demand begins to increase near 6:00 a.m., peaking during the mid-day hours, and then declines into the evening. This is a typical pattern for departments that are actively providing response to medical incidents as overall demand closely follows general human activity.

Distribution

Distribution is an analysis that illustrates travel capability of specific units based on the existing roadway network. In essence, travel time is mapped using geographic information system (GIS) software and a model is created that estimates how much of a given area can be covered within a specified period of time. The figure below illustrates each study department's four, eight, and 10-minute travel capability.

Figure 33: Four and Eight Minute Travel Models

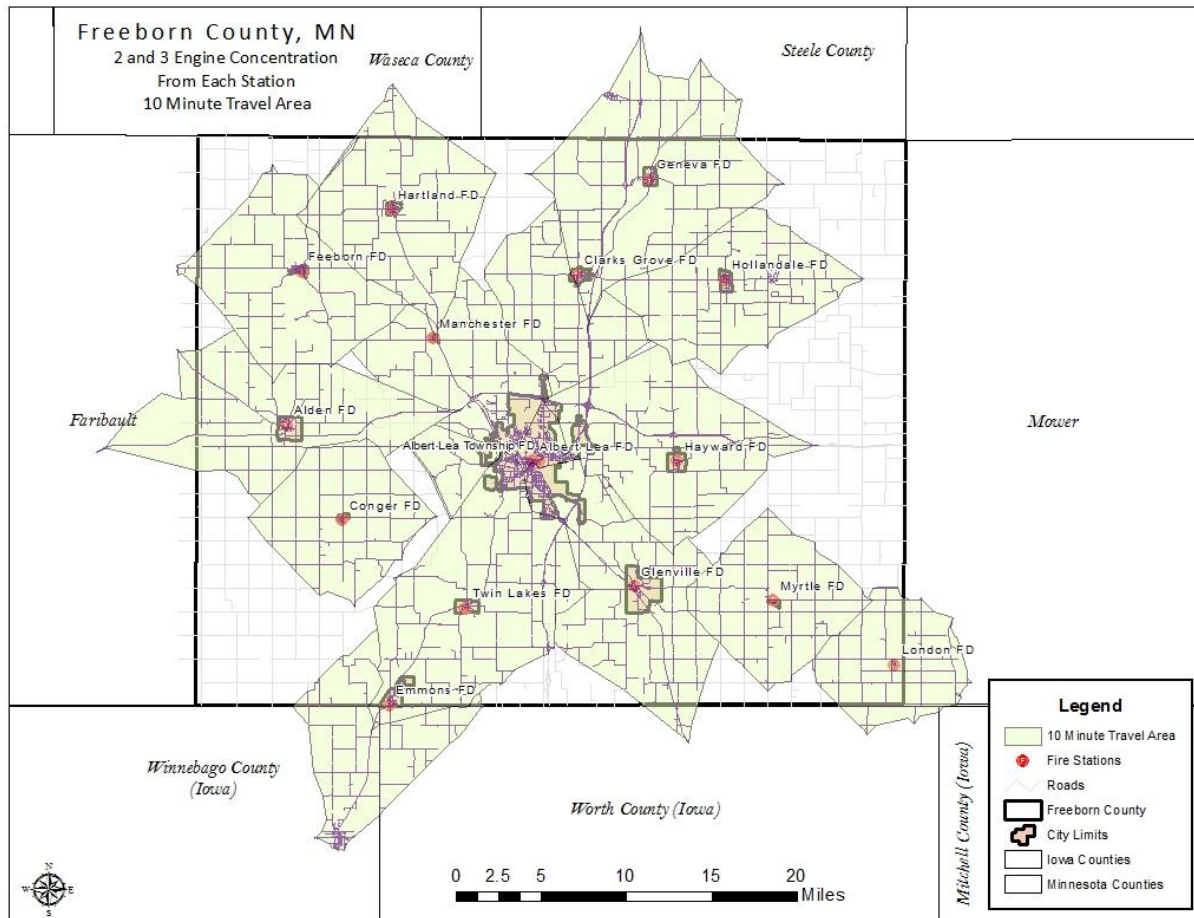
Based on this analysis, a vast majority of the population of Freeborn County can be reached within 10 minutes of travel. ESCI also evaluated travel distances based on ISO recommendations as illustrated below.

Figure 34: ISO 1.5 Engine, 2.5 Mile Aerial, and Five-Mile Travel Distance

To receive the highest ISO credit, a property should be within 1.5 miles of a fire engine, 2.5 miles of an aerial apparatus, and five miles from a fire station. Those properties outside five road miles from a fire station are considered ‘unprotected’ and may have substantially higher fire insurance premiums. For Freeborn County, only ALFR has an aerial device and most of the population lives within a reasonable distance from a fire station within the center of each response area. There are, however, a number of properties located outside of the five mile distance.

Concentration

Resource concentration is an analysis that determines how quickly a department can assemble the appropriate number of apparatus and/or personnel on the scene of a major incident. In many cases, this is conducted considering a single family detached dwelling that is considered moderate risk in which at least two engines and one aerial apparatus would be needed to effectively mitigate the incident. The figure below illustrates Freeborn County’s concentration capability within 10 minutes of travel and includes use of mutual aid departments from outside the County when appropriate.

Figure 35: Resource Concentration (Three Engines/10 Minutes)

Based on this analysis, a large portion of Freeborn County can receive an effective response force of three engines within 10 minutes of travel, if dispatched simultaneously.

Response Performance

Perhaps the most visible and notable of emergency services to the public, response performance is the primary measure by which the public gauges overall effectiveness. Response time can be measured in a number of ways but industry standards suggest that performance be measured on a percentile rather than simply reporting the average.

Response time, however, is not simply a matter of operational response. The response time continuum begins when someone calls 9-1-1 and ends when the appropriate resources are on the scene of the incident. The response time continuum, the time between when the caller dials 9-1-1 and when assistance arrives, is comprised of several components:

- **Processing Time** – The amount of time between when a dispatcher answers the 9-1-1 call and resources are dispatched.

- Turnout Time – The amount of time between when units are notified of the incident and when they are en route.
- Travel Time – The amount of time the responding unit actually spends on the road to the incident.
- Response Time – A combination of turnout time and travel time and generally accepted as the most measurable element.

Before entering this discussion, however, it is important to provide a brief discussion about how the statistical information is presented, particularly in regard to average versus percentile measures.

The “average” measure is a commonly used descriptive statistic also called the mean of a data set. It is a measure to describe the central tendency, or the center of a data set. The average is the sum of all the points of data in a set divided by the total number of data points. In this measurement, each data point is counted and the value of each data point has an impact on the overall performance. Averages should be viewed with a certain amount of caution because the average measure can be skewed if an unusual data point, known as an outlier, is present within the data set. Depending on the sample size of the data set, this skewing can be either very large or very small.

As an example, assume that a particular station with a response time objective of six minutes or less had five calls on a particular day. If four of the calls had a response time of eight minutes while the other call was across the street and only a few seconds away, the average would indicate the station was achieving its performance goal. However, four of the five calls, or 80 percent, were beyond the stated response time performance objective.

The reason for computing the average is because of its common use and ease of understanding. The most important reason for not using averages for performance standards is that it does not accurately reflect the performance for the entire data set.

With the average measure, it is recognized that some data points are below the average and some are above the average. The same is true for a median measure which simply arranges the data set in order and finds the value in which 50 percent of the data points are below the median and the other half are above the median value. This is also called the 50th percentile.

When dealing with percentiles, the actual value of the individual data does not have the same impact as it did in the average. The reason for this is that the percentile is nothing more than the ranking of the data set. The 90th percentile means that 10 percent of the data is greater than the value stated and all other data is at or below this level.

Higher percentile measurements are normally used for performance objectives and performance measurement because they show that the large majority of the data set has achieved a particular level of performance. This can then be compared to the desired performance objective to determine the degree of success in achieving the goal.

For this analysis, ESCI was most interested in the ability to respond with the appropriate resources to the highest percentage of incidents. For this reason, ESCI analyzed National Fire Incident Reporting System

(NFIRS) and computer aided dispatch (CAD) data and generated average and 90th percentile response performance for emergency incidents only.

NFPA 1221 Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, recommends that telecommunicators (dispatchers) receive and dispatch incidents within 60 seconds when measured at the 90th percentile. Data provided did not include the time when in the 9-1-1 call was received therefore call processing performance could not be calculated.

Figure 36: Historical Call Processing Performance Summary

	Average	90th Percentile
2012	0:00:30	0:01:05
2013	0:00:24	0:00:53
2014	0:00:28	0:01:06

NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments recommends that career fire departments be en route to emergency incidents within 60 seconds for medical responses and 80 seconds for fire responses; allowing an extra 20 seconds to don protective clothing that is not required for medical incidents. This time period is known as turnout time. Unfortunately, the data provided did not include en route times; therefore, turnout time could not be calculated.

NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer and Combination Fire Departments does not provide a recommendation for turnout time performance since most personnel are responding from home, work, or elsewhere from within the community. Rather, this standard focuses on total response performance and provides a tiered recommendation based on the following population densities.

Figure 37: NFPA 1720 Response Performance Recommendations

Classification	Population Density Per Square Mile	Response Time Performance Target	Percentile
Urban	>1,000	9:00	90th
Suburban	500 - 999	10:00	80th
Rural	<500	14:00	80th
Remote	499 or less		90th

NFPA 1710 does not differentiate response performance recommendations based on population density and assumes that career fire departments should be able to respond to all areas of their primary response area within 240 seconds (4:00) of total travel time. When combined with the recommended turnout time performance objectives, the total response equals 5:00 or 5:20 (depending on incident type) when

measured at the 90th percentile. The following figure summarizes the overall response performance for the study departments.

Figure 38: Historical Total Response Performance Summary

	Average		80th Percentile	
	2014	2015	2014	2015
ALFR	04:28	04:03	0:08:00	0:07:00
ALTFD	05:03	06:13	0:06:00	0:08:00
AFD	03:57	04:40	0:05:00	0:06:00
CGVFD	07:17	03:52	0:09:00	0:05:24
CVFD	12:00	09:20	0:13:48	0:12:24
EVFD	04:31	05:15	0:06:48	0:06:24
FVFD	02:30	04:24	0:03:00	0:08:00
GVFD	03:54	02:18	0:06:48	0:04:00
GFD	07:03	06:44	0:10:00	0:10:00
HVFD	07:00		0:10:00	0:14:36
HFD	11:20		0:15:00	0:10:24
HDVFD	09:09	09:09	0:13:36	0:13:24
LFD	08:23	07:17	0:11:36	0:13:00
MVFD	07:00	12:00	0:09:24	0:06:00
MFD	07:00	11:00	0:07:00	0:06:00
TLVFD				

*ALFR calculated at 90th percentile.

Based on the recommendations contained within the two standards, most of the study departments are meeting the recommended response performance objective for rural areas of 14:00. For the urban area, ALFR is slightly above the recommended objective but it has been ESCI's experience that a 5:20 response performance objective is extremely aggressive.

Mutual and Automatic Aid Systems

Communities have traditionally forged limited agreements to share resources under circumstances of extreme emergencies or disasters. These agreements, known as mutual aid agreements, allow one community to request the resources of another in order to mitigate an emergency situation or disaster that threatens lives or property. There are numerous mutual aid agreements, both formal and informal, in place between fire, police, and emergency medical agencies within the study area, both with participating departments and those surrounding the study area.

However, it is important to define the level of mutual aid systems in place in this region. Mutual aid can take several forms, and this analysis of mutual aid programs will begin with a brief explanation of the various types of mutual aid systems used by the fire service in various parts of North America.

Basic Mutual Aid upon Request

This form of mutual aid is the most basic and is typically permitted under broad public laws that allow communities to share resources upon request during times of disaster or during local and regional emergencies. Often, these broad laws permit communities to make decisions quickly regarding mutual aid under specified limitations of liability. These broad laws can allow a community to tap into resources from their immediate neighbors, as well as very distant resources in communities with which they have very little day-to-day contact otherwise. Under this level of mutual aid, specific resources are typically requested by the fire department, through the appropriate chain of command, and sometimes coordinated by local or regional emergency management personnel. Depending on the level of the request, the response can sometimes be slow and the authorization process may be cumbersome due to the exchange of official information or even elected official's approval that may be required.

Written Mutual Aid Agreements

This form of mutual aid takes the previous form one step further by formalizing written agreements between communities (typically immediate neighbors in a region) in an effort to simplify the procedures and, thus, cut response time. Usually, these written agreements include a process that takes the request and response authorization down to a lower level in the organization, such as the Fire Chief or other incident commander. By signing such agreements, communities are "pre-authorizing" the deployment of their resources under specified circumstances as spelled out in the agreement. Most often, these agreements are generally reciprocal in nature and rarely involve an exchange of money for service, though they may include methods for reimbursement of unusual expenses for long deployments.

Automatic Aid Agreements

Once again, this form of mutual aid takes the process an additional step further by spelling out certain circumstances under which one or more community's specific resources will respond automatically upon notification of a reported incident in the neighboring community. In essence, automatic aid agreements expand a community's initial first alarm response to certain types of incidents by adding resources from a nearby neighbor to that response protocol. Typically, such agreements are for specific geographic areas where the neighbor's resource can be expected to have a reasonable response time and are for only specific types of incidents. An example of such an agreement would be having a neighboring community's engine respond to all reported structure fires in an area where it would be closer than the second or third-due engine from the home community. In other cases, the agreement might cover a type of resource, such as a water tender or aerial ladder, than the home community does not possess. An example of this would be having a neighboring community's water tender respond to all reported structure fires in the areas of the home community that do not have pressurized hydrants.

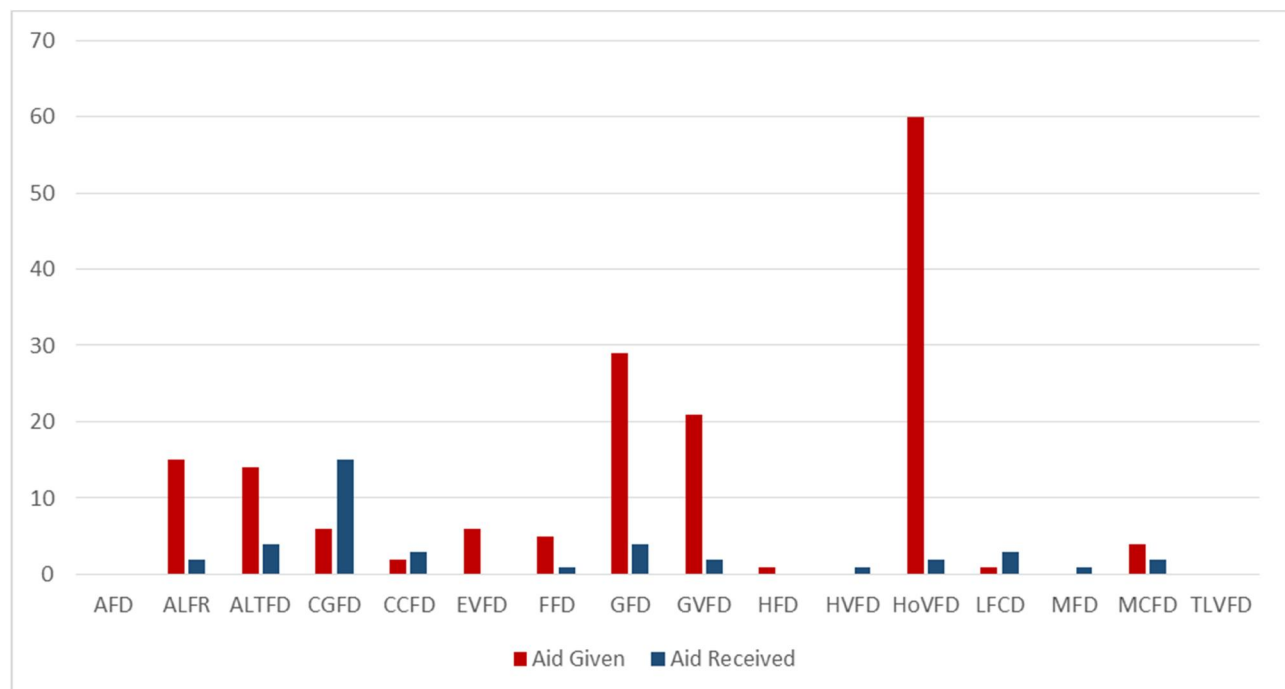
Automatic aid agreements may be purely reciprocal or they may involve the exchange of money for the services provided. Purely reciprocal agreements are common, but typically are used where each community has some resource or service it can provide to the benefit of the other. These services or resources need not be identical. For instance, one community may send an engine to the other community on automatic response to structure fires, while the second community agrees to send a water tender to

the first community's structure fire calls in exchange. These reciprocal agreements are sometimes made without detailed concern over quantification of the equality of the services exchanged, since they promote the effectiveness of overall services in both communities. In other cases, the written agreements spell out costs that one community can charge the other for services, typically where no reasonable reciprocation can be anticipated.

One primary purpose of automatic aid agreements is to improve the regional application of resources and staffing. Since fire protection resources are most frequently established because of the occupancy risks in a community and not necessarily a heavy workload, these resources may be idle during frequent periods of time. While fire departments make productive use of this time through training, drills, pre-incident planning, and other functions, the fact is that these expensive resources of apparatus and staff are not heavily tied up on emergency incidents. Communities that share certain resources back and forth are, in essence, expanding the emergency response workload of those units across a larger geographic area that generally ignores jurisdictional lines. This expanded use of resources can strongly benefit both communities that might otherwise have significantly increased costs if they had to procure and establish all the same resources alone. Automatic aid can be used effectively to bolster a community's fire protection resources or to reduce unnecessary redundancy and overlap between communities.

The Freeborn County fire departments already actively participate in mutual aid with adjacent departments, particularly for structure fires. The figure below summarizes how mutual and automatic aid have been historically used by the study districts.

Figure 39: Mutual Aid Utilization



It is common in a system such as this that some departments rely on others more frequently. As an enhancement to the existing mutual aid agreements, ESCI will discuss the use of automatic aid in the shared services section of this report.

SUPPORT PROGRAMS

Although the delivery of fire suppression and emergency medical services lies at the core of each department's mission, it is necessary for every emergency services agency to be supported by other activities. These activities provide the basis for employee training and education, career development, public safety education, fire prevention, and code enforcement.

Training

Providing safe and quality fire and emergency services requires a well-trained workforce. Training and education of personnel are critical functions for each study agency. Without quality, comprehensive training programs, emergency outcomes are compromised and emergency personnel are at risk. "One of the most important jobs in any department is the thorough training of personnel. The personnel have the right to demand good training and the department has the obligation to provide it."¹

Proper training of emergency services personnel starts prior to being hired or joining an agency. Specific knowledge and skills must be obtained to achieve a basic understanding of the roles and responsibilities of an emergency responder. Several of the study agencies have entered into a joint effort to offer a combined 'rookie school' that provides this basic introductory training. Beyond the introductory issues, personnel should be actively engaged on a regular basis and tested regularly to ensure that skills and knowledge are maintained. In order to accomplish this task, agencies must either have a sufficient number of instructors within their own organization or be able to tap those resources elsewhere. Training sessions should be formal and follow a prescribed lesson plan that meets specific objectives. In addition, a safety officer should be dedicated to all training sessions that involve manipulative exercises.

Beyond the regular training offered to general staff, certain individuals should be offered specific officer development training in order to prepare them for more responsibility as they progress through the agency's command structure. Placing individuals in positions of authority without first giving them the tools to succeed often ends in failure and discouragement by both the officer and their subordinates. The following figure summarizes the training programs elements.

¹ Klinoff, Robert. *Introduction to Fire Protection*, Delmar Publishers, 1997. New York, NY.

Figure 40: Summary of Training Program Elements

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glennville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Individual Responsible for Training Program	Second Assistant Chief	Deputy Chief, assisted by a training committee	One Captain	Training officer	One volunteer is responsible for fire training. First responder training is handled separately.	Two volunteers are responsible for training	Fire chief, plus appointed training officer	Assistant chief	Training officer	Assistant Chief	Two training officers in place	Training Officer	Training Officer	Training officer	Three training officers	One volunteer firefighter is assigned to training
Training Scheduling	Monthly on second Tuesday	Daily on every shift	Monthly on first, fourth, and fifth Monday	Monthly on first Monday. Supplemented with some weekend training.	Monthly on first Monday	Four drills per month on Mondays	Monthly on first Monday	Monthly training on first and second Monday	Once monthly on the second Monday plus some weekend supplemental training.	Once monthly on first Thursday	Monthly on second Wednesday	Monthly on second Tuesday.	Monthly on Last Monday	Monthly on first Tuesday	Monthly on fourth Monday	Monthly on second Monday
Training Required Prior to Scene Response	Limited tasks, no entry until completion of Firefighter I	Firefighter I and II and Hazmat Awareness	Firefighter I and II	Firefighter I class before making entry	Firefighter I is minimum level for entry.	Firefighter I	Limited tasks, no entry until completion of Firefighter I and II	On scene tasks are limited, no entry, until trained	Tasks limited until training is completed.	Firefighter I and First Responder	Firefighter I	Firefighter I class before making entry	Must be in training or completed before responding	Must complete 1001 class before making entry	No minimum requirement, but limit tasks and no entry until trained	Firefighter I
Training Required to Leave Probation	One year probationary period. Must meet minimum attendance standards	Firefighter I and II and Hazmat Awareness minimum	6 month probationary period. Must complete Firefighter I and II training to get off probation.	Two year probationary period. Must complete Firefighter I or First Responder in the first two years	Informal	One year probation, must make 6 training session and 6 meetings	One year probationary period. Must meet minimum attendance standards	One year, informally	One year probationary period. Not associated training minimum but must meet expectations.	One year probationary period. Must meet minimum attendance standards	No minimum	Must complete Firefighter I and II and Hazardous Materials Awareness training in the first year. Must also complete an additional 6 months of training to complete probation.	No defined probationary period	No requirement	Limited in activities until training is completed. Informal probation.	Not defined, being considered
Established Minimum Training Hours Annually	Not defined	Meet and exceed annual hours required for state certification at Firefighter I and II	Must attend 50 percent of township training sessions and meetings, not including city trainings	Meeting attendance and extrication training. Cannot miss more than 4 meetings per year and have to make up missed training.	No established minimum. Members counseled if participation is declining.	Attendance to a minimum, of 6 meetings and 6 training sessions required	Can have no more than 3 unexcused absences per year	Must complete 12 hours of structural firefighting training per year, as a minimum.	Cannot miss more than 3 consecutive meetings.	24 hours of training per year	Informal only. Not allowed to make entry until trained to some degree.	Minimum of 12 hours training required per calendar year.	Minimum of 3 meetings per year	Must attend 50% of calls and meetings during the year	Minimum of 3 meetings and 1 training event per year	Must attend 4 meetings and calls each year to meet minimum requirement for retirement
Specialized Officer Training Provided	Only as incorporated into regular training	Included in ongoing training content	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Consistent Driver/Operator Training Provided	Only as incorporated into regular training	Program currently being developed	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Internal driver training program and periodic driving course.	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training	Only as incorporated into regular training
Annual Training Plan Developed and Followed	Planned on an annual basis	Training plan identified in a quarterly training book. Well-developed program.	Month to month, generally. EMR training is planned in advance.	Classes planned 2 weeks to a month in advance	No planned training calendar, in process of being developed	Training topics varies depending on need and weather. No structured schedule.	List of training for the year is posted in the station	Currently working on developing a one year plan and schedule	Planned 6 months to a year in advance. 24 disciplines identified to be covered.	No structured plan/schedule	Month to month plan	Month to month	Informal only	No structured plan/schedule	Month to month	Training is planned ahead about six months in advance
Software Support for Training Program	Hard copy only	Documented via ImageTrend software	Hard copy and input to ImageTrend	Hard copy only	Hard copy only	Documented via ImageTrend	Hard copy only	Hard copy only	Internal spreadsheet used and reported on ImageTrend	Hard copy only	Hard copy only	Hard copy only	Hard copy only	Hard copy only	Hard copy only	Hard copy only
Training Program Dedicated Budget	Annual Budget approved by the governing body	Line item budgeted for training of approximately \$40,000 annually	No dedicated training budget. Training funding is received from the State Fire Marshal.	None	No dedicated budget	No dedicated budget	No dedicated budget. Use MN training funds when possible	\$4,000 is listed in the budget for training, plus funds received from the state	Access state funds when possible	No dedicated budget. Use MN training funds when possible	No dedicated training budget	State training grant funds are accessed aggressively. Approximately \$175 per year per person. Also uses multiple mobile training props from the State Fire Marshal.	No dedicated training budget	None	State training reimbursement funds are used when available. Get classes from the college about once a year.	Included in \$5,000 annual department budget
Training Resources Available	Meeting space at the station	Limited. Classroom at fire station. No drill ground, training tower of props in the area.	Meeting room in the station, otherwise local streets only	Classroom at the station, otherwise only city streets and parking lots	Can access meeting room in community center in the same building as the fire station.	Classroom at the station seats about 20. No other training resources.	Classroom at the station. Otherwise only local streets and buildings.	Meeting table in the station, otherwise local streets only	Meeting space available in the community center adjacent to the station. Props from the college used as well.	Meeting space at the station	Meeting room in the station, otherwise local streets only	Classroom at the station, otherwise only city streets and parking lots	Meeting space in the station apparatus bays	Classroom in the station. Use city streets, has access to a field for drilling	Meeting space in the station	Classroom shared with community center attached to the fire station
Standard Training Curriculum Manuals Used	IFSTA manuals and on line sources	IFSTA and Jones and Bartlett manuals used	No reference library	No library	IFSTA Manuals used	IFSTA Manuals used	IFSTA manuals used	No reference library, get some materials from the college	IFSTA Essentials manuals use and various magazines	Mostly from member experience	Have some videos. Use vocational college periodically	Some Jones and Bartlett manuals are on hand	No manuals on hand. Internet research mainly	No library	Some manuals on hand. Some videos on hand.	IFSTA Manuals used
Lesson Plans Used	Yes	Yes	No	No	No	No	Some from IFSTA manuals	No	No	No	No	No	No	No	No	No

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollendale	London	Manchester	Myrtle	Twin Lakes
Night Drills Conducted	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Multi-Agency Drills Conducted	Periodically	Monthly joint training with Albert Lea Township. Some joint training with others when live fire drills are conducted	Train with city of Albert Lea twice monthly	Drill with Geneva often. Occasionally with others.	Drill with Alden, Emmons and Walters a couple of times a year	Periodically drill with Twin Lakes. Occasionally complete live burns with other neighbors	Training with other departments several times a year	Drill with Clark's Grove fairly often, sometimes with Hollendale and Ellendale	Some shared live fire training and periodically train jointly with other departments	Periodically, not regularly scheduled	No	Often invite other fire departments to drills. At least 3 joint trainings per year.	Occasionally attend live burns with neighboring agencies	Periodically, not regularly scheduled	Train with neighbors periodically, attend live burns with neighboring agencies	Periodically train with Emmons

Discussion

All the departments in Freeborn County have personnel that are responsible for developing training drills. In some departments it is performed by multiple persons and in others it is a designated position. Each department should designate one training officer responsible for implementing an annual training calendar specifically for their agency. This person would establish the training calendar based on the requirement set by the Minnesota Board of Firefighter Training and Education.

All the departments perform monthly training. These training meetings differ in every aspect from; day of the month, week of the month, and time of the month. Each department should designate the same day, week, and time for training to create consistency throughout the county. The advantage of this model is that it would allow for agencies to train together throughout the year. If the county is broken into quadrants the coordination of training drills would be easier to accomplish. Agencies that train together before operating together will improve the chances of producing a positive outcome.

Each department should formally establish minimum requirements for emergency scene operations. All study departments require Firefighter I for entry and operations but allow all personnel to respond and work in a support roles. The departments should acknowledge the importance of a written document to make sure all employees are perfectly clear what the expectations are while operating on emergency scenes. This will also help reduce the liability of the municipality in case an employee acts outside of the scope of practice.

The study departments should formally establish minimum requirements for an employee/member to leave probation. The departments vary and it only seems to be in relation to time on the department and meeting's attended. A standardized probationary clearing process county-wide would ensure that all employees/members are receiving the same type of training and would create a safer working environment for all involved. Departments should create a formal document that specifies the following; time of probationary period, minimum training required for interior operations, minimum required training for exterior operations, minimum required training for apparatus operation, and minimum attendance of training drills and meetings.

The State of Minnesota requires licensed firefighters to receive 24 hours of annual fire training to maintain their license. This should be the standard across Freeborn County for all fire departments. Currently the departments are meeting this requirement informally. The agencies meet a minimum of once a month for generally 3 hours, the first hour is usually a business meeting, followed by two hours of training. The departments also conduct special drills for live burns and any new equipment purchases that require additional training.

There is no formal training facility located in Freeborn County at this time. A shared training facility would benefit all involved communities and could serve as a source of potential revenue for the county's fire departments. A committee should be established to determine the location and costs associated with building and maintaining a training facility. The committee would also need to research the possible funding mechanisms available to the county and communities.

Currently, there is no set coordination between departments regarding training. The departments appear to have very good working relationships with each other and they should consider implementing a quarterly training drill with the surrounding departments.

The departments should formally develop and adopt a standard operating procedure to place a safety officer on scene for all events. To take this a step further the departments should provide all members with formal training to be safety officers. If the designated safety officer is unable to attend a training event, they should be replaced by the next available person.

In regards to training recordkeeping, ALFR, EVFD, GVFD, and ALTFD use software provided by the State of Minnesota. This software is a free web based fire software program that is capable of tracking multiple facets of the fire and emergency services and is available to all fire departments in the State of Minnesota. It is recommended that all study fire departments utilize this free software to document its annual and refresher training. Manual documents can easily be misplaced or destroyed over time. Utilizing the on-line training documentation ensures that the documents will not be lost and that the proper training information is accurately documented.

Life Safety Services

An aggressive risk management program, through active fire and life safety services, is a fire department's best opportunity to minimize the losses and human trauma associated with fires and other community risks.

The National Fire Protection Association recommends a multifaceted, coordinated risk reduction process at the community level to address local risks. This requires engaging all segments of the community, identifying the highest priority risks, and then developing and implementing strategies designed to mitigate the risks.²

A fire department needs to review and understand the importance of fire prevention and public education, appreciating its role in the planning process of a community with diversified zoning including residential, commercial, and industrial properties.

The fundamental components of an effective fire prevention program are listed in the following figure, accompanied by the elements needed to address each component.

Figure 41: Fire Prevention Program Components

Fire Prevention Program Components	Elements Needed to Address Program Components
Fire Code Enforcement	Proposed construction and plans review New construction inspections Existing structure/occupancy inspections Internal protection systems design review Storage and handling of hazardous materials
Public Fire and Life Safety Education	Public education Specialized education Juvenile fire setter intervention Prevention information dissemination
Fire Cause Investigation	Fire cause and origin determination Fire death investigation Arson investigation and prosecution

The fire prevention programs of the study agencies are detailed in the following tables:

² Kirtley, Edward, *Fire Protection Handbook*, 20th Edition, 2008, NFPA, Quincy, MA.

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Applicable Fire Code	Statewide adoption of the State Fire Code only. No local adoption.	City adopted 2007 Minnesota State Code	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. Burning ordinance is in place.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.	Statewide adoption of the State Fire Code only. No local adoption.
Local Sprinkler Ordinance/ Amendment	None	No amendments included in the adoption	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Agency Involvement in New Commercial Construction	Processed by city. No FD involvement or sign off.	By building department. FD is consulted but does not sign off on permit	Processed by County Planning. No FD involvement.	Processed by city. No FD involvement or sign off.	Processed by city and county building. No FD involvement.	Processed by city or county building. FD is not consulted	Processed by city. No FD involvement or sign off.	Permits are processed by the City, and County. No FD involvement.	Permits are processed by County Planning. No FD involvement.	Processed by city maintenance. No FD involvement or sign off.	Processed by County Planning. No FD involvement.	Processed by county. No FD involvement or sign off.	Processed by county. No FD involvement or sign off.	Processed by city. No FD involvement or sign off.	Processed by county. No FD involvement or sign off.	Processed by the city of Twin Lakes. No FD involvement or sign off.
Key-Vault Entry Box Program	None	Knox-Box system encouraged	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Types of Inspections Conducted	None	Inspections completed on commercial occupancies	None	None	None, but some building familiarization tours.	None	No, but complete a pre-plan facility tour annually	None but some tours and pre-planning	None	None	None	None	None	No, but complete a pre-plan facility tour annually	None. Some pre-incident plans are in place.	None
Number of Occupancies Inspected	N/A	600 -700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inspection Frequency	N/A	3 year rotation. Annually on higher risk.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Formal Citation Process	N/A	Through municipal court	None	N/A	N/A	N/A	N/A	None	None	N/A	None	N/A	None	N/A	None	N/A
Number of Personnel Assigned to Inspection	N/A	One Lieutenant per shift	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Company Inspection Program	N/A	Shift Lieutenants	None	None	N/A	N/A	N/A	None	None	N/A	None	None	None	N/A	None	N/A
Public Education Activities	Some school outreach during fire prevention week. No other	Fire Prevention Week open house school program. "T-shirt" program with homework assignments. Extinguisher classes, presentations to community groups.	No program is in place	None	Limited. No program but will assist neighboring departments with programs in schools at times	Pancake breakfast held during fire prevention week each year to promote fire safety	Some but limited. No schools in Freeborn, but help Alden each year during fire prevention week.	No program is in place, but may send someone to assist with school program during fire prevention week at an area school	Presentations at Glenville-Emmons Elementary School during Fire Prevention Week. Also prevention tours at the fire station on request.	Limited	No program but donates some money to Albert Lea to contribute to public education outreach	Some presentations at Hollandale Christian School	None	None	None	None

	Alden	Albert Lea	Albert Lea TWP	Clark's Grove	Conger	Emmons	Freeborn	Geneva	Glenville	Hartland	Hayward	Hollandale	London	Manchester	Myrtle	Twin Lakes
Topics Included in Public Education Program	Calling 911, home escape, stop, drop and roll	Calling 911, Exit Drills in the Home(EDITH), stop, drop and roll, don't play with fire, don't fear firefighters	N/A	N/A	N/A	Emphasize smoke detectors, stop, drop and roll, home escape during fire prevention week at pancake breakfast	Calling 911, home escape, stop, drop and roll	N/A	General fire safety, calling 911, home escape, stop, drop and roll	Calling 911, home escape, stop, drop and roll	N/A	Calling 911, home escape, stop, drop and roll	N/A	N/A	N/A	None
Smoke Detector Program	None	Active program is in place including battery replacement	No	None	None	No formal program but emphasized during fire prevention week	None	No	Batteries changed and all 1st grade students are given a detector during FP week.	None	No	None	None	None	No	None
Number of Pub. Ed. Contacts	K - 3rd grade, about 150 students	Approximately 1,000 annually	N/A	N/A	N/A	About 200 annually	N/A	N/A	Approximately 7 school groups	N/A	N/A	N/A	N/A	N/A	N/A	None
Level of Fire Investigation Provided by Agency	Will call State Fire Marshal	Line officer calls investigator if needed.	Call Albert Lea or State Fire Marshal	Will call State Fire Marshal	Will call State Fire Marshal for assistance	Call Albert Lea or State Fire Marshal	Will call State Fire Marshal	Call Albert Lea or State Fire Marshal,	Call Albert Lea or State Fire Marshal	Will call State Fire Marshal as needed	Call Albert Lea or State Fire Marshal,	Will call State Fire Marshal for assistance	Will call State Fire Marshal	Call Albert Lea or State Fire Marshal	Call Albert Lea or State Fire Marshal	Call Fire Investigation Team

Discussion

The Albert Lea fire department operates a more robust fire prevention program than the other participants, as would be expected from a larger, career staffed, agency. The other participants have varying degrees of involvement in prevention and public education efforts. Of the study agencies, only the City of Albert Lea has adopted the 2007 Minnesota State Fire Code. The other 15 agencies have not adopted a model fire code on their own, but instead simply fall under the state adoption of the Minnesota State Fire Code.

New Construction Permitting Processes

In terms of new construction building permit processes, in Albert Lea a new construction building permit is processed through the city building department. The fire department is consulted, however does not conduct a review of submitted plans to check compliance with fire related code concerns, nor is fire department sign off required for issuance of the building permit. None of the remaining study agencies is engaged in the plan review or building permit process which, instead, is managed at the city or county level.

When a new building is constructed in a fire department's service area, it becomes the fire protection responsibility of the fire department for the life of the structure. It is important to make an effort to engage in the permitting process and seek to assure that a new building is compliant with applicable fire and life safety codes. A greater level of involvement should be considered.

Existing Occupancy Safety and Code Enforcement

Code enforcement inspections in existing buildings is conducted by Albert Lea, using on duty Lieutenant who is assigned to inspection duties. The program is effective, resulting in the completion of approximately 600 to 700 existing occupancy inspections annually. Each commercial building is scheduled to be inspected on a three-year rotation, with higher risk occupancies on an annual schedule.

Of the other fire departments, none conducts existing occupancy inspections, as is commonly found in smaller organizations, simply due to staffing and workload considerations. Instead, dependence is placed upon the Minnesota State Fire Marshal's Office to conduct inspections. It should be understood, however, that the state inspectors are not able to inspect all occupancies, so many buildings, even ones that may represent a substantial fire risk, may go without periodic safety inspections.

Fire and Life Safety Public Education

Each of the agencies takes a different approach to public education outreach. Some similar efforts are in place in Albert Lea, Emmons, Conger, Alden, Hollandale, Glenville and Geneva, but to varying degrees. Hayward does not have a formal program, but donates some funding to the Albert Lea program, which is the most developed. All of the agencies focus their efforts around annual Fire Prevention Week, completing primarily school outreach. Albert Lea also undertakes additional outreach throughout the year and operates an impressive "T-Shirt Program" in the Kindergarten and first grades. The remaining agencies have very limited or no public education programs in place.

Because public education is time consuming and challenging for smaller organizations that have limited staffing resources, it presents a valuable opportunity to share resources and address needs as a shared service initiative, which is discussed in more detail later in this report.

Fire Cause Determination

All of the fire departments in the study area look toward either the Minnesota State Fire Marshal or the Albert Lea Fire Department for assistance with fire cause determination. ESCI learned that a regional Fire Investigation Team (FIT) was in place in the past but is not fully operational at this time. FIT teams are an excellent approach to fire cause investigation and consistently prove to be effective in areas that do not experience a high level of fire occurrence. The redevelopment of a FIT team is encouraged and represents an excellent shared services initiative.

Section II – Future Opportunities for Cooperative Efforts

In the next report section, the opportunities that are available to Minnesota fire departments are identified and discussed. Having completed the above evaluation of current conditions, ESCI is able to use the information obtained in that review to compare practices that are in place in the study agencies and identify needs in order to evaluate the opportunities that exist in the study area for shared service delivery between the agencies.

In Minnesota, fire department can work together in various ways, ranging from very fundamental sharing of resources and programs up to and including legal assimilation of multiple agencies into one in the form of a merger or consolidation, where feasible. ESCI has worked with many shared services efforts in the state, and has learned in our experience that no single approach can be applied successfully to all situations – there is no “one size fits all” solution. Instead, strategies must be identified that will work in each, unique, area.

The balance of this report examines the multitude of options available to the study agencies and provides direction where appropriate.

AVAILABLE PARTNERING OPTIONS

A number of basic strategies are generally available to Minnesota fire departments when considering cooperative efforts and shared services, beginning with a do-nothing approach (status quo) and ending with complete unification of two or more organizations into what is, essentially, a new emergency service provider. The potential options are:

- Complete Autonomy
- Administrative Consolidation
- Functional Consolidation
- Operational Consolidation
- Legal Unification or Merger

A description of the primary methodologies is found below.

Complete Autonomy

This is a status quo approach in which nothing changes. While often viewed negatively, in some cases the best action is no action. In this case, the ten participants simply continue to do business as usual, cooperating with and supporting each other as they do today, but with no change to governance, staffing or deployment of resources.

This approach carries with it the advantage of being the easiest to accomplish as well as maintaining the independence of the organizations and local control. That is, the currently elected boards continue to oversee their individual agencies as their electorate desires without the complication of considering the views of a different constituency. It creates the least stress on the organizations and does not necessitate

reorganization. What it lacks is long term commitment and the virtues that can be gained in terms of increased efficiency that are realized in a cooperative service delivery environment.

In today's environment, taxpayers typically hold their elected officials accountable for delivering a quality level of service at an affordable rate and expect creative thinking to solve problems or achieve those ends. This study area is no exception. While "maintaining the status quo" is easy and involves the least amount of impact to the agencies, it may well be one of the riskier decisions to make politically.

Administrative Consolidation

Under an administrative consolidation, two or more agencies remain independent of each other from a governance standpoint but they blend some or all of their administrative functions. The result is often one of increased efficiency in the use of administrative and support personnel. Overhead costs are typically reduced and duplication of efforts is eliminated, however, it is noted that in the case of all volunteer agencies like those in this study, administrative costs, and potential savings, are small. However, important efficiencies may be gained.

An administrative consolidation is most effective in larger organizations where duplication exists and workload assignments can be re-aligned to gain efficiencies. In the instance of the fire departments in this study, due to their smaller size and small number of administrative and support personnel, opportunities for gains with this approach are limited.

Functional Consolidation

Public entities in Minnesota have authority under law to enter intergovernmental agreements (IGAs) for the purpose of cost containment and service delivery enhancement. The laws of the State of Minnesota address the issue, allowing intergovernmental contracts for any lawfully authorized governmental function.³

This type of cooperative effort can include any function within the study departments that allows them to deliver services. In the preceding Evaluation of Current Conditions section of this report, examples are identified such as shared training efforts, fire prevention activities, equipment purchasing, logistics, etc. Through functional consolidations, each agency benefits from the resources of the whole while maintaining independence as separate organizations. In some instances, functional consolidations serve as a prelude to a future merger.

Operational Consolidation

This strategy joins two or more entities from an operational standpoint through the execution of an intergovernmental agreement (IGA).

The Operational Consolidation strategy takes the next step in the continuum of closer collaboration development. In this case, all operations are consolidated under a single organization that serves both agencies. The fire departments, whether only a few, or all ten, remain independent agencies from a legal standpoint, but from a service delivery perspective they operate as one. An Operational Consolidation,

³ Minnesota Statutes, section 471.59. Joint Exercise of Powers Act.

accomplished through a written agreement between two or more agencies, requires a significant cooperative commitment is sometimes undertaken as a step toward complete integration. The level of trust required to implement operational consolidation is very high, since independence and autonomy have been willingly relinquished in favor of the preferred future state of a complete integration.

In Minnesota there are several types of Inter-Governmental Agreements (IGA)s, including Joint Exercise of Powers, Intergovernmental Service Agreements, and Intergovernmental Service Transfers. Within the Joint Exercise of Powers Act there are two primary options for sharing services: Shared Powers Agreements and Service Contracts. In Shared Powers Agreements, governments jointly share responsibility for providing a service such as fire protection. Service Contracts, however, allow one city to 'contract' with another government for services. The Intergovernmental Service Agreement is the most common form of cooperative arrangement in Minnesota. It is an agreement-formal or informal, written or oral, between two or more governments about the delivery of a service or services. These agreements may take many forms. Intergovernmental Service Transfers are a permanent transfer of total responsibility for the provision of a service from one government unit to another.

Legal Unification

Legal unification of fire departments is commonly referred to using differing terms such as merger, consolidation and annexation. This formal approach unites not only the programs but also the organizations themselves. State laws addressing political subdivisions usually detail a process for legal unification.

Typically, state laws draw a distinction between words like annexation, merger, and consolidation when speaking of legal unification. Organizationally, however, the outcome of any such legal process results in a single, unified, organization. The major differences between the legal strategies relate to governance and taxation issues. In many states, some process of inclusion exists that essentially involves the annexation of one entity to another, preserving the governing body and taxing authority of the surviving agency. A legal merger, on the other hand, usually entails the complete dissolution of two or more agencies with the concurrent formation of a single new entity (and governing body) in place of the former.

Legal consolidation of fire departments has not been a common practice in the State of Minnesota, although it has become widely accepted in other states. In fact, until recent years, legislation did not exist that empowered Minnesota fire departments to combine legally. However, the situation changed when the City of Cloquet, Perch Lake Township, and the City of Scanlon agreed to petition the legislature for a special law that would create the state's first independent fire district with taxing authority. The result was the formation of the Cloquet Fire District, the first of its kind in the state.

Because ESCI often finds that study agencies are reluctant to relinquish control of their respective fire departments to a full consolidation, the intent of this project is evaluate each potential and provide policymakers with the information so that they can make an educated decision regarding the future of fire protection and emergency services within their respective communities.

OPTIONS FOR SHARED SERVICES

Based on the previous discussion of the various options for Freeborn County, ESCI has developed the following options, which are considered to be feasible within the study area.

Functional Cooperative Efforts

The following is a summary of potential functional cooperative efforts that ESCI believes can be implemented within the study region with little to no fiscal impact and each department retaining their individual identity and independence.

Development of an Automatic Aid System

The study area has a well-developed Mutual Aid system in place that provided needed resource support to the participating agencies. However, the system is not automated, requiring that command officers call for specific resources when needed. Establishment of an Automatic Mutual Aid, (Automatic Aid) system was a need that was identified by multiple agencies. ESCI provides the departments with a template from which to develop a Mutual Aid Box Alarm System (MABAS) program. In order for this system to work effectively, it must first be determined appropriate staffing for each apparatus type.

Regionalized Incident Command

Incident Command practices vary between the subject agencies. Standardization of a regional approach is important, as has been recognized in the form of a county-wide system that is currently being developed in the area.

Shared Health and Safety Programs

The health and safety of firefighters is critical. Establishing a shared approach to addressing these needs in the Ramsey area can be beneficial to all five organizations.

Capital Replacement Planning

Planning for long term replacement of capital assets was identified as a shared need between all of the agencies. Four of the five cities have replacement schedules in place for fire apparatus, which is commendable. Limited planning has been completed with regard to fire stations and other fixed facilities. Approaching planning from a regional perspective offers opportunities for cost savings and operational efficiencies.

Apparatus and Equipment Purchasing

In concert with the above initiative, purchasing of fire apparatus and equipment can be shared, often resulting in significant cost savings and/or future cost avoidance.

Shared Recruitment and Retention Efforts

All of the participating agencies depend heavily on the use of Paid on Call responders and, as a result, share a common need for recruitment and retention of capable personnel. Shared recruitment and retention activities offer the opportunity to pool personnel resources and offer additional gains, as noted below.

Regionalized Training Opportunities

Training of emergency responders is a need that is common to all five organizations. Currently, training is generally conducted independently, offering opportunities to address shared training needs based on a regionalized perspective.

Unification of Standard Operating Guidelines

Each of the agencies has developed Standard Operating Guidelines that are well established. While the SOGs are generally acceptable as they stand, efforts to standardize the procedures regionally will improve operating efficiency and, most importantly, firefighter safety.

Operational Cooperative Efforts

Beyond functional cooperative efforts, and considering that this project includes all departments serving Freeborn County, there are potential operational strategies that could be implemented to improve the overall delivery of service throughout the County. The following is a list of potential feasible options beginning with a 'do nothing' approach and ending with full consolidation of the study departments.

Status Quo

Since the current delivery of services has not been a problem in the past, ESCI would be remiss in not stating that the status quo is feasible option. This option, however, will not address the issues that all departments are facing in regards to staffing and availability of resources. If no further operational cooperative efforts are pursued, it will be necessary for the study departments to work through the functional strategies to ensure that staffing, capital replacement, and future funding are following a sustainable model.

Quadrant Approach

The geography of Freeborn County, as well as the major highways that traverse the County effectively divide the County into four relatively equal quadrants: Northeast, Northwest, Southeast, and Southwest. In addition, the City of Albert Lea, if merged with Albert Lea Township FD, would serve as the hub department for this strategy. In essence, the quadrants would be arranged as follows:

- Northeast
 - Geneva
 - Hollandale
 - Clarks Grove
- Northwest
 - Ellendale
 - Hartland
 - Freeborn
 - Alden
 - Manchester

- Southeast
 - London
 - Myrtle
 - Hayward
 - Glenville
- Southwest
 - Emmons
 - Twin Lakes
 - Conger

If implemented, these quadrants could become individual consolidated departments and be self-governing.

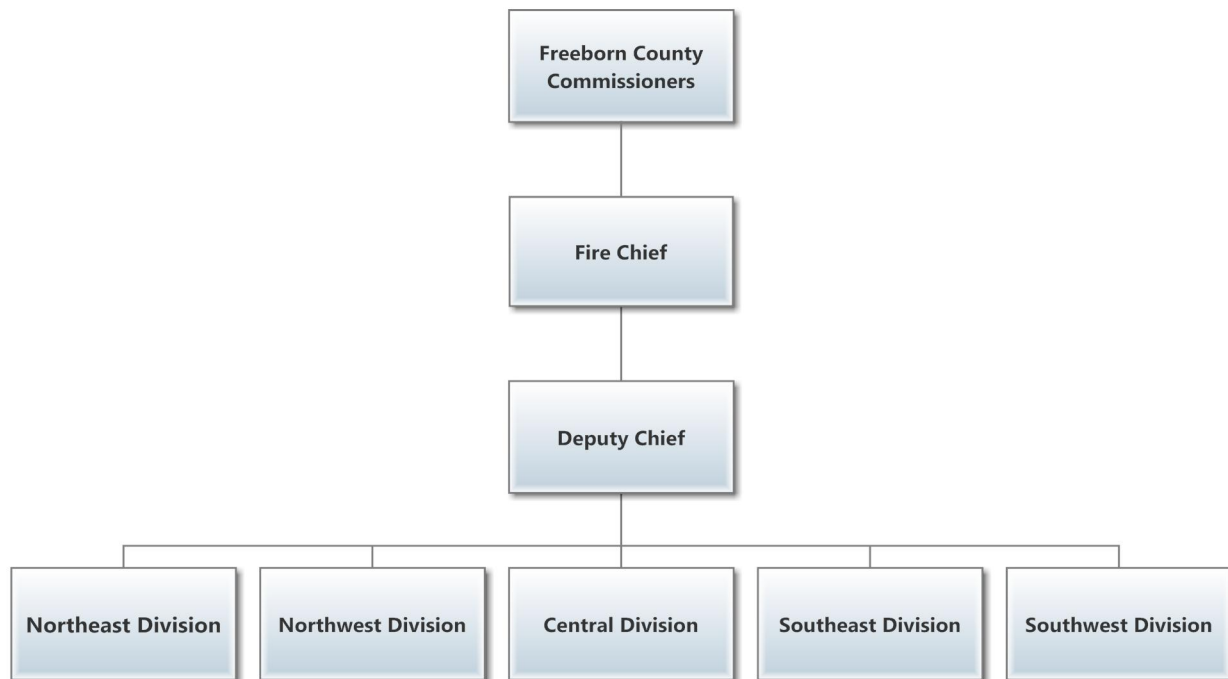
County Fire Department

Considering that the study departments serve a majority of Freeborn County, it is feasible that all the existing departments could be merged into a single countywide organization. This could be accomplished in a number of ways, including:

- County-Operated Fire Department
- Intergovernmental Agreements
- Creation of a Joint Powers Authority
- Creation of a Countywide Fire District

County-Operated Fire Department

Under this strategy, Freeborn County would be the governing authority over the organization. Since, during the process of this study ESCI did not directly interact with County staff at the administrative level, this strategy would need substantial support from County leaders, particularly those in elected positions. Operationally, this option would build on the quadrant approach and provide for regional supervisory staff tied to a centralized command structure. The figure below illustrates an example of the organizational structure.

Figure 42: Example Organizational Structure (County Department)

Intergovernmental Agreements

The use of intergovernmental agreements has been used frequently to allow various governmental entities to cooperate more closely with adjacent units of government. In this case, the strategy would allow the various departments and their supporting municipalities to determine how far to extend their agreements. For instance, ALFR could enter into an agreement with ALTFD and the other agencies directly adjacent to the City and the Township.

Simultaneously, the southeast could all enter into a separate agreement, and likewise for the remainder of the County. This method of cooperation allows for more control of how the merged organization is created and is much easier to exit if circumstances change in the future. The organizational structure for this type of option will be dependent upon how the agreements are structured.

Joint Powers Authority

A Joint Powers Authority (JPA) functions much like a school district in that it is considered a separate unit of local government but is represented by members of the creating organizations. Alternatively, governing members could be elected from the community at-large to provide more of a community centered vision. One of the largest JPAs that ESCI has worked with is Orange County Fire Authority (OCFA) in southern California.

Created in 1995, OCFA provides services to over one million people in the unincorporated areas of the County as well as 15 municipalities. Each participating agency appoints a representative to the JPA board and the JPA has authority to levy a tax (through the County) to support operations. This type of

governance model could be created incrementally just as the intergovernmental agreement model and does not have to include all study agencies. The organizational structure for this option would be similar to a county-operated department with the exception that the governing authority would be the JPA board rather than the county commissioners.

Countywide Fire District

The final strategy is to go one step further from a JPA and create an independent fire district with taxing authority. Although the use of this governance model is limited in Minnesota, the Cloquet Area Fire District (CAFD) was successful at securing legislation that does allow it. An independent fire district would be a separate unit of government and would have independent authority to levy a tax to support operations. This authority would not be limited to county or municipal control. In addition, how the governmental structure is constructed would be left to the documents that create the fire district.

In the case of CAFD, the municipalities that are served by the organization each have representation on the governing board. Alternatively, these members could be elected from the community at-large. Like the county-operated fire department and JPA models, the organizational structure for this option would be similar but the governing authority could be an independent body, the county commissioners, or any other group as determined in the creation documents.

FISCAL ANALYSIS

This report section summarizes the fiscal impact of the various strategies previously noted. It should be stated, however, that these options are not exhaustive and community leaders, combined with department leadership, should continue to work together to determine what is the best fit for their respective communities.

Status Quo

Continuing the current method of delivering fire protection and other emergency services to Freeborn County would, obviously, not have a fiscal impact. However, the current model is not considered to be sustainable from a funding perspective and a long-term solution should be evaluated.

If the current model is continued, ESCI recommends that the County consider implementing a fire tax across the entirety of the County, which would allow for continued sustainable funding. Based on current funding levels, this would require a levy of \$0.0483 per \$100 valuation. These funds would then be distributed to the various departments based on presented budgets or a pre-determined funding formula.

County-Operated Fire Department

In most cases, county-operated organizations are funded through the general fund. Since the current structure for fire protection is the responsibility of each municipality, for Freeborn County to fund a countywide fire department, an additional property tax of \$0.0483 per \$100 valuation would be required to meet existing funding levels.

Intergovernmental Agreements

Funding for intergovernmental agreements often rests with the participating organizations and can vary widely based on the expectations (and financial capabilities) of each entity. Contributions will be determined and identified in the creating documentation. The final fiscal impact will be highly dependent upon which of the study departments decide to join together in such an arrangement.

Joint Powers Authority

As with intergovernmental agreements, funding for JPAs will rest with the participating agencies and will vary depending on how the governing document outline compensation. One such agreement that exists between the City of South St. Paul and the City of West St. Paul, which created the South Metro Fire District, requires equal payment from each of the two municipalities to support the fire department.

The final fiscal impact will be highly dependent upon which of the study departments decide to join together in such an arrangement.

Countywide Fire District

As with a county-operated fire department, an independent taxing district will allow for a long-term sustainable funding mechanism. The primary different here is that the district board will determine the tax rate based on the expectations of the communities included and the ability and willingness of the

residents to pay for services to meet those expectations. As discussed previously, a levy of \$0.0483 would be necessary to sustain the current level of funding.

FINDINGS, RECOMMENDATIONS, AND PLAN OF IMPLEMENTATION

As identified previously, each of the study departments are experiencing certain difficulties in maintaining adequate staffing (particularly during the day), replacement capital equipment, and ensuring adequate and consistent training across the region. This report details a number of feasible options to address these issues and goes further to provide options for enhanced cooperative efforts throughout Freeborn County. In which direction the departments chose to move will ultimately be left to local policymakers. A decision to move forward is not a decision to consolidate but to explore the feasible options presented in this document.

The remainder of this report describes a standard recommended process for moving forward with the potential implementation of a cooperative service delivery effort. The word potential is used here because a part of this process includes the policy decisions necessary to determine, based on the results of this study, whether there is sufficient desire among the political bodies of the organizations to continue with the process or not. The implementation begins with that step.

Conduct Visioning Session with Policymakers

The initial stage of implementation begins with the most elementary decision: “Do we want to move forward or not?” It is extremely important that at this stage of the process it is clearly recognized that this is a public policy decision on the part of the governing entities involved. A decision to consider altering the way in which a critical public safety service is provided, in some cases even permanently altering the governance of those services, is clearly in the purview of the elected bodies. While senior management input should be considered, the final decision should not rest at any level lower in the organization than those who are elected to represent the respective communities.

For this reason, it is recommended that the elected bodies meet together for the initial discussion of the feasibility study and its projected options and outcomes. Depending on the number of elected officials, the policy-makers can decide whether to include all elected officials or a representative group assigned to represent each governing entity. During this policy stage, involvement by additional staff should be kept to a minimum, perhaps at the senior management level and then for the sole purpose of providing technical support. It is important to limit the ability for the process to be “hijacked” at this point by strenuous arguments for or against the idea from department-level personnel whose opinions may be influenced by turf, power, or control issues. Stakeholder input is important, but opportunity can be provided for this once the policy-makers have determined what is in the best interest of their citizens as a matter of public policy.

It is equally important that the policy-makers recognize exactly what decision is under consideration in the initial vision meetings. The purpose is to weigh the strategies, advantages, fiscal outcomes, and potential impediments of the feasibility to determine whether to commit local resources, and move the process forward. The decision is not, at this point, a final decision to execute a determined strategy. The final commitment to take legal actions necessary to finalize implementation of any given strategy will come much further into the process.

One of the best methods for initiating this vision process is to begin with policy-makers sharing an open discussion of critical issues. Each entity's representative can present a short description of those critical issues, service gaps, or service redundancies that might be concerning them relative to their provision of public safety administration. As each entity takes its turn presenting these issues, a picture typically emerges of those shared critical issues that two or more of the entities have in common. This focuses the discussion on which of the feasible options from the study best address those critical common issues and how.

As the discussion focuses on those feasible options with the greatest opportunity to positively impact shared critical issues, the discussion can expand to the strengths and weakness of the strategies relative to the conditions, financial abilities, and cultural attitudes of the communities involved. There should be a concerted effort to remain at a policy level without becoming overly embroiled in operational discussions of implementation details. Those will be addressed once a common vision has been established for a future strategy that is in the best interest of all the communities involved.

This is also the time that communities may make the decision to opt-out of further involvement. This may occur for a number of reasons. There may be legitimate concern that an individual community does not truly share an adequate number of common critical issues with the other communities. There may also be a legitimate concern that the feasible strategies do not do enough to benefit a given community and would leave it with too many remaining critical issues. And, of course, there is always the possibility that a given community will not feel that the projected financial outcome is within their ability or provides a cost-benefit that is better than their current situation. Any such decisions by one or more communities should not be considered a discouraging factor, for that is the very purpose of the vision sessions. In many cases, other remaining entities continue moving forward with a shared vision for cooperative service delivery even after one or more communities determine not to.

The goal of the vision session(s) is to develop a decision by the policy-makers on whether to continue with the next steps and, if so, what direction those steps should take. The vision should be sufficiently decisive as to be actionable by senior appointed officials and staff. While there will be many details to work out in the implementation process, the vision should clearly articulate the intention of the agreeing policy bodies on the desired outcome. Once this occurs, the real work begins.

After setting the joint vision, this policy-maker group should meet together at set intervals or as needed to hear the progress of the Joint Implementation Committee and its working groups and refine direction when necessary. The appropriate interval will depend on the situation and the complexity and length of the process itself, but often a quarterly meeting is sufficient.

Establish a Joint Implementation Committee

The next step in the process is to establish a Joint Implementation Committee that will be given the overall responsibility with leadership and management of the planning and implementation process. This will be the "nuts and bolts" group that works through the details, overcomes the challenges, reacts to new information, and makes many of the actual decisions on the implementation plan. This group should have much wider representation from stakeholders both inside and outside of the individual organizations

involved. Membership in the Joint Implementation Committee may include senior management personnel and, where appropriate, labor representatives. The following is an example of a Joint Implementation Committee:

- City Manager and County Manager (or equivalent)
- Fire Chief from each community
- Finance Director from each community

The Joint Implementation Committee's first order of business should be to determine the rules and procedures of this committee. This should include such items as:

- How often does this group meet? (Monthly is typical.)
- How are absences handled? (Assigned alternates are recommended.)
- How does communication (occasionally secure) within this committee take place?
- How will meetings be conducted? Are there "rules of conduct" for the meetings?
- Under what circumstances will the meetings be opened to attendance by non-members?
- How will the group pursue consensus? When voting is necessary and how will that occur?

Develop and Implementation Plan

Once the ground rules have been set, the Joint Implementation Committee should schedule a strategic planning process. Consideration should be given to having this strategic planning process directed by neutral outside professionals trained in strategic planning facilitation. The strategic planning process should be held in a neutral setting away from the daily activities and noise of the usual office environment. It need not be an expensive retreat, but it should be organized in a way to focus energy and attention exclusively to the planning process for its duration. The purpose of the initial strategic planning session should be as follows:

- To further articulate and refine the joint vision set by the policy bodies.
- To identify critical issues that will be met as the implementation process unfolds.
- To identify potential impediments to implementation from:
 - Organizational culture
 - Availability of data and information
 - Outside influences and time demands
- To set the specific goals and objectives of the implementation process and the timelines for accomplishment.
- To establish the necessary implementation working groups.

This process should result in the preparation of an implementation planning document that can be shared with the policy body, stakeholders, and others who will be involved in or affected by the implementation process. The document should provide the joint vision, describe the cooperative service strategy or strategies being pursued, the desired outcome, the goals that must be met in order for implementation

to be achieved and the individual objectives, tasks, and timelines for accomplishment. When fully and adequately prepared, this document will serve as the master “road map” for the process and will help guide the next steps of developing working groups and assigning responsibilities.

Establish Implementation Working Groups

As part of the implementation strategic planning process, various implementation working groups should be established that will be charged with responsibility for performing the necessary detailed work involved in analyzing, weighing, and deciding on specific processes. Membership for these implementation working groups should be roughly identified as part of that process as well.

The number and titles of the working groups will vary depending on the type and complexity of the strategies begin pursued. However, the following list provides some typical working groups used in most consolidation processes and a description of some of their primary assigned functions and responsibilities.

Governance Working Group

This group will be assigned to examine and evaluate various governance options for the cooperative service effort. A recommendation and process steps will be provided back to the Joint Implementation Committee and the policy-maker group. Once approved, this working group is typically assigned the task of shepherding the governance establishment through to completion. The membership of this group typically involves one or more elected officials and senior city and agency management.

Finance Working Group

The group will look at all possible funding mechanisms and will work in partnership with the governance working group to determine impact on local revenue sources and options. Where revenue is to be determined by formula rather than a property tax rate, such as in a contractual cooperative venture, this group will evaluate various formula components and model the outcomes, resulting in recommendations for a final funding methodology and cost distribution formula. The membership of this group typically involves senior financial managers and staff analysts, and may also include representatives from the agencies’ administrative staffs.

Legal Working Group

Working in partnership with the governance working group, this group will study all of the legal aspects of the selected strategy and will identify steps to ensure the process meets all legal obligations of process and law. Where necessary, this group will oversee the preparation and presentation of policy actions such as ordinances, joint resolutions, dissolutions, and enabling legislation. The group will also be responsible for working with other elected bodies, such as State Legislatures, when necessary to accomplish establishment of local selected governance. The membership of this group typically involves legal counsel from the various entities involved and may also include senior city management staff.

Personnel Working Group

The group will work out all of the details of necessary administrative personnel changes required by the strategy. This involves detailed analysis of processes, procedures, service delivery methods, deployment,

and administrative staffing. The membership of this group typically involves senior agency management and mid-level officers.

Communications Working Group

Perhaps one of the most important, this group will be charged with developing an internal and external communication policy and procedure to ensure consistent, reliable, and timely distribution of information related to the cooperative effort. The group will develop public information releases to the media and will select one or more spokespersons to represent the communities in their communication with the public on this particular process. The importance of speaking with a common voice and theme, both internally and externally cannot be overemphasized. Fear of change can be a strong force in motivating a group of people to oppose that which they do not clearly understand. A well informed workforce and public will reduce conflict. The membership of the group typically involves public information officers and senior city or agency management.

Meet, Identify, Challenge, Refine, and Overcome

Once the working groups are established, meeting, and completing their various responsibilities and assignments, it will be important to maintain organized communication up and down the chain. The working group chairs should report regularly to the Joint Implementation Committee. When new challenges, issues, impediments, or opportunities are identified by the working groups, this needs to be communicated to the Joint Implementation Committee so that the information can be coordinated with findings and processes of the other working groups. Where necessary, the Joint Implementation Committee and a working group chairperson can meet with the policy-makers to discuss significant issues that may precipitate a refinement of the original joint vision.

The process is continual as the objectives of the strategic plan are accomplished one by one. When sufficient objectives have been met, the Joint Implementation Committee can declare various goals as having been fully met until the point comes when the actual implementation approval needs to be sought from the policy bodies. This formal “flipping of the switch” will mark the point at which implementation ends and integration of the agencies administrative staff begins.

Appendix – Example Mutual Aid Box Alarm Assignment

Below is an example of how a run card can be configured. One card is created for each response zone or “Box”. A Box may be a town or city, parts of a town or city (multiple Boxes), a township, or any other geographic separation that makes sense from a response standpoint. (Note: Random unit numbers are placed in this example as an illustration of how they are entered.)

It would be beneficial for the participating departments to develop an apparatus numbering system that is consistent county-wide so everyone is using the same references (Engine, Tender, Ladder, Brush, etc.) Then numbers are assigned that also identify the agency (for example, in the study area Freeborn is identified by using the 900 series, so units would be identified as Engine 901, Engine 902, Tanker 901, Brush 901, etc.) While a numbering system appears to be in place in the area, it does not appear to be used universally by all agencies. Doing so is essential to an effective Automatic Aid or MABAS system. Other numbering systems can be used; it is more expedient to be able to differentiate over the air and in the run cards without listing the agency name every time a piece of apparatus is referenced.

Run cards can also be established in geographic regions within the study area. In this instance, dividing the area into quadrants would be appropriate. The resources are grouped by their geographic proximity to others. An example run card may look something like that shown below.

Response Zone: Freeborn		
Incident Type	Apparatus Assignment	Move Up
Structure Fire:		
• 1 st Alarm	Freeborn Engine 947, Manchester Engine 983, Harland Engine 961, Alden Tanker 928	Clarks Grove Engine 931, Geneva Tanker 953 move up to the Freeborn Station
• 2 nd Alarm	Clarks Grove Engine 931, Geneva Tanker 953	Albert Lea Engine 1 and Albert Lea Township Tanker 922 move up to Freeborn Station
• 3 rd Alarm	Albert Lea Engine 1 and Albert Lea Township Tanker 922	Conger Engine 936 and Twin Lakes Engine 1 move up to Freeborn Station
• 4 th Alarm	Conger Engine 936 and Twin Lakes Engine 1	
Single Engine Response	Freeborn Engine 947	
Brush Fire	Freeborn Unit 947, Engine 949, Alden Grass 927	
Vehicle Fire	Freeborn Engine 947	
Chimney Fire	Freeborn Engine 947	
Auto Accident	Freeborn Engine 947	
Medical	Freeborn Engine 947	
Hazardous Materials	Freeborn Engine 947	

The agencies should first agree to a common apparatus commitment by apparatus and incident type. For example, a first alarm structure may call for two engines and one tanker as the initial response, with on engine and one tanker moved up to the station in the jurisdiction where the fire is occurring. A second

alarm then calls for the moved up engine and tanker, which are now closer, and backfills with a similar move up. Each alarm is sequenced with units sent to the scene and others moved up to be available for a greater alarm. The number and type of units are determined by the fire chiefs based on need and available resources, the numbers above are simply examples.

In addition to physical resources, the departments should adopt standardized staffing of each apparatus type to ensure that sufficient personnel are being deployed along with requested apparatus. It is ESCI's recommendation that the following minimum staffing be adopted for regional use.

- Engine Four Personnel
- Tanker/Tender Two Personnel
- Aerial Four Personnel
- Wildland Two Personnel

A box alarm system is best managed and operated through a Computer Aided Dispatch system. ESCI learned that the current dispatch system has the capability of working with this kind of a system. However, it is also noted that, if necessary, the same kind of system can be set up using hard copy run cards in a binder on the dispatch console.